

THE NORTH DAKOTA FARMER

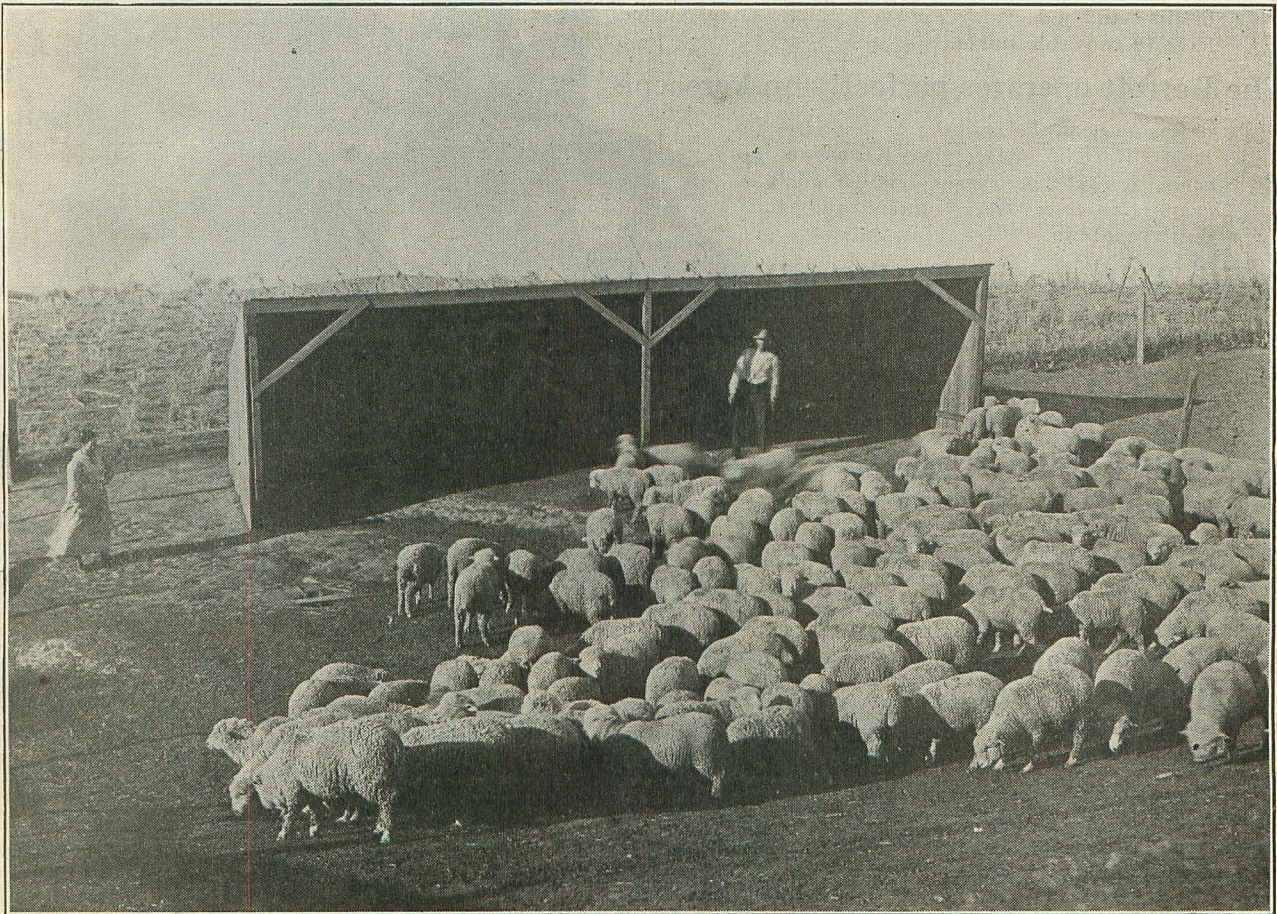


"THE NORTH DAKOTA FARMER FOR NORTH DAKOTA FARMERS"

Vol. 16, No. 9

Lisbon, North Dakota, March 15, 1915

50 Cents A Year



"Sheep require little labor and usually keep in good health. They give quick returns in both mutton and wool"

978.4

N814

Graham

WHY 40,000 "DETROIT" ENGINEERS USE ENGINES LIKE THIS DAILY!

Our \$50,000⁰⁰ Cash Bond
30 DAY FREE TRIAL OFFER

OUR GUARANTEE

SATISFACTION ABSOLUTELY GUARANTEED OR YOUR MONEY BACK

We guarantee you that if for any reason whatever you would rather have the money than the engine, and notify us of your desire to return same within thirty days after it arrives at your depot we will immediately advise you where to ship the engine and, upon your complying with our request in this matter, every cent you may have paid us for the engine will be cheerfully repaid to you, without question and without delay, immediately upon receipt of engine.

Two Hundred Miles Beyond
Arctic Circle

Detroit Engine Works,
Detroit, Mich., U. S. A.

Gentlemen—We note you wish our report on the five engines we recently purchased from you. We are glad to inform you that we have only good things to say about them. One of them is in daily use at Gibstad, Norway, 200 miles north of the Arctic Circle.

ANEL H. HANSSSENS Co.,
Arendel, Norway.

"Most up-to-date engine in these parts. Develops more power than any two-horse power engine to my knowledge."

P. J. LURK, Lodi, Miss.

5 Big Reasons WHY

Thousands of farm homes use "Detroit Engines" for sawing, threshing, spraying, pumping, churning, grinding feed, running a dynamo to light the house or barns, etc., etc.

The 2 cycle "Detroit" has only 3 movable parts

- 1 This means simple construction, easy to run, no cams, valves, gears, push rods, guides to break and cause loss of time and money for endless repairs. Other engines have **19 movable parts**.

The Detroit operates perfectly on kerosene

- 2 or gasoline, alcohol, naphtha or distillate, but most "Detroit" owners use **Kerosene**, because it's cheap, easy to get—it don't evaporate—gives more power, and it don't explode.

"With 2 Strokes of the Piston"

- 3 The Detroit 2-Cycle engine does the same work which requires 4 strokes in the complicated 4-cycle engine. The "Detroit" creates a power impulse every 2 strokes, other engines require 4 strokes.

You don't crank the Detroit

- 4 It starts instantly, without cranking. It can be reversed while running, also the speed may be changed while running. The Detroit Fuel Injector insures perfect combustion.

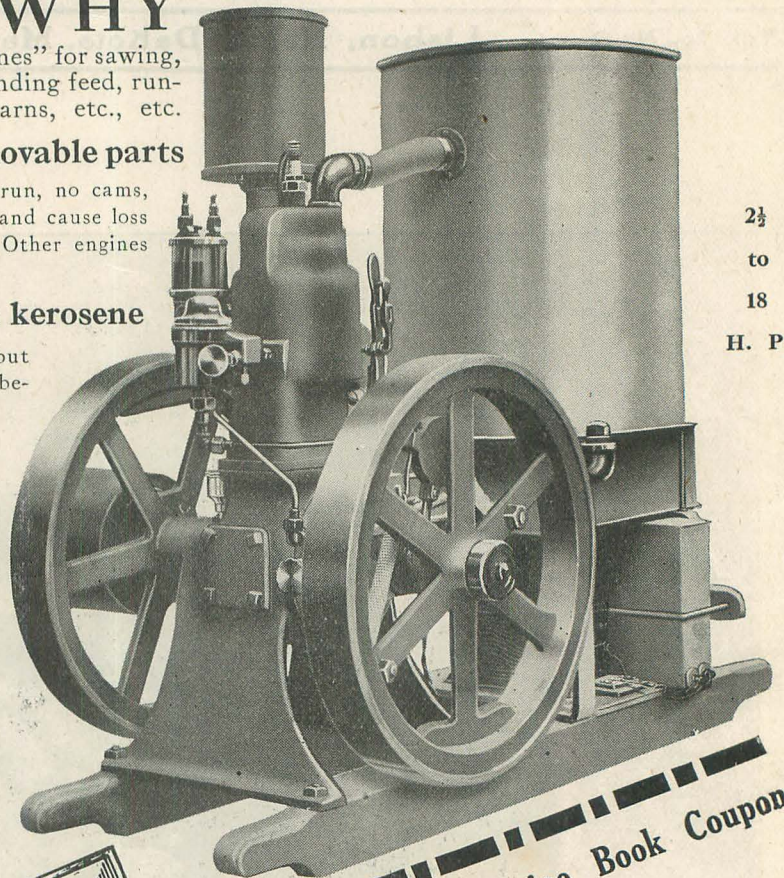
- 5 A \$50,000.00 cash bond guarantees you against loss on our 30-day free trial.

Mail Coupon TODAY

for FREE 34-page Engine Book "COMMON SENSE POWER"

This complete Engine book describes entire line of Detroit Engines—how they are made—why they are guaranteed for 10 years and also full particulars of 30-day free trial plan.

DETROIT ENGINE WORKS
66 Bellevue Avenue, Detroit, Mich.

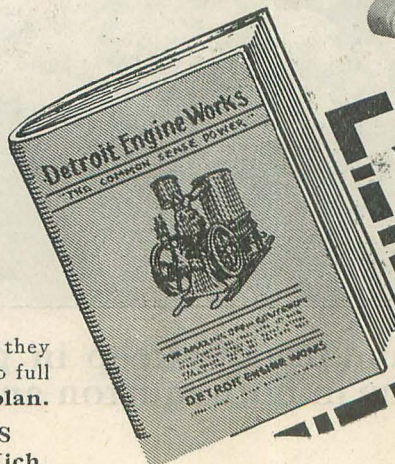


2½

to

18

H. P.



FREE 34-page Engine Book Coupon

Detroit Engine Works, 66 Bellevue Ave.
Detroit, Mich.—Send me **Absolutely Free**
New 1915 Engine Book "Common Sense Power,"
which tells all about "Detroit" Engine.

Name.....
Town.....State.....
R. F. D.....
Tear off Coupon and mail
TODAY

THE NORTH DAKOTA FARMER

Vol. 16, No. 9

LISBON N. D., MARCH 15, 1915

50 Cents a Year

Finishing and Marketing Hogs

W. H. Peters, N. D. Experiment Station

The time of year is at hand when the farmer who has a bunch of spring pigs on hand is beginning to think about marketing them. The profit from the pig crop depends much upon the ability to finish and market the hogs economically. The problems that arise in this connection are principally as follows: first, when should heavy feeding on the fattening period begin? Second, what feeds should be used? Third, when should pigs be sold? Fourth, how may they be marketed to the best advantage? These are problems which each individual hog grower must solve for himself and in solving them must be governed by existing local conditions.

When to begin heavy feeding will depend upon the age of the pigs and the ultimate weight at which they are to be marketed. Very often it will pay best to put early spring pigs, that have made a good growth, on the market early in the fall, say in October when they should weigh from 180 to 225 pounds. This is advisable because then very little grain is required to finish them, and in all probability, the price will be higher then than later. It seldom pays, however, to sell pigs as light as 130 to 150 pounds and if a bunch of pigs will not weigh more than 120 pounds by October first they will be more profitable if carried along on a light growing ration until December first, and then finished off thru the winter months to as heavy a weight as the feed available will permit. However, under normal conditions it seldom pays to carry pigs beyond the 300 pound mark.

Pigs are on a full fattening ration when they are receiving about four and one-half pounds of grain per day per 100 pounds live weight of pigs. If they are to be marketed at 180 to 225 pounds weight, they should not be on full feed more than two months prior to marketing or they will be apt to be too soft in flesh to command the

top market price. With the three hundred pound pig a little softness does not discount so much and a longer fattening period may be practiced with success, at three to four months fattening period being permissible.

What feeds to use at this time of the year will depend on the kind and amounts of home grown feeds on hand and the relative costs of feeds that must be purchased. The most successful hog growers are following the practice as far as possible of keeping the growing pigs on grass, clover or alfalfa pasture thruout the summer or else of providing pasture by sowing a succession of crops suitable to pasturing hogs thru the course of the summer. A succession of crops that has been found quite satisfactory by many farmers is as follows: Seeding a field of oats and peas, mixed, early in the spring, this being followed by a field of rape, this by another field of oats and peas or of peas sown alone and if a field of corn is put in it can be pastured off in the fall very economically. If the season favors the maturing of corn fairly well, a bunch of hogs can be fattened by running them in the field of corn with very little additional grain feeding. During the summer months from one and one-half to two and one-half pounds of grain per day per hundred pounds live weight of pigs in addition to good pasture is all that is required and while fattening on a field of good corn, one pound of grain per day per 100 pounds live weight of pigs is all that is necessary to produce a gain of one and one-fourth pound to one and three-fourths pound per pig per day.

In the absence of a corn field or of corn to use in fattening hogs, barley should form the basis of the grain ration with other low grade grains or screenings mixed in to cheapen the ration. A little shorts may be used, but too much of it makes an expensive feed. Unless one has a very large

drove of hogs and labor is very scarce, the system of feeding regular amounts of grain twice a day is preferable and will produce larger gains than any of the many self-feeding devices.

The selling of hogs is by no means the easiest part of the business. If a farmer is located at some distance from a market and only has from 15 to 40 pigs to sell each year, he is at a disadvantage. He must sell to a local buyer or ship along with one or more neighbors or buy additional hogs to make a carload, which is sometimes difficult to do.

On most railroads the smallest sized single deck stock cars require a minimum weight of 15,000 pounds in order that the shipper may get the minimum carload freight rate. To make this weight would require seventy-five 200 pound pigs or fifty 300 pound pigs.

In many localities in different parts of the country livestock growers are forming societies with the primary object of facilitating marketing thru the co-operative method. Naturally, some of these societies from one cause or another, have failed in their purpose but most of them are accomplishing satisfactory results. In some localities these societies have been the means of developing a far-reaching reputation for the locality and bringing buyers in large numbers into the districts.

Hogs will always sell best if shipped to market in uniform carload lots especially if they are uniform in both size and condition. In growing and fattening hogs it will pay to strive to develop this characteristic of size and uniformity in the herd.

Every farmer should have coming to his home an agricultural or daily journal that gives complete market reports, at least, from his nearest market. These market reports should be looked over from week to week as a guide to the time to sell.

In shipping to a large market the best way is to consign to a reliable commission firm as a commission firm can sell to better advantage than a private individual.

In loading a car of hogs, care should be taken to get the weight up to a minimum freight rate but care should also be taken not to overcrowd a car as that may result in a dead hog or two when they arrive at market, es-

pecially if the hogs are very fat. Any attempt to give a load of hogs an extra fill before putting them on the car is sheer folly as it will only make them shrink the more during shipment. Dry feed should be fed for a day before shipping and in transit if the haul is long enough to necessitate feeding enroute.

To finish and market hogs to the greatest advantage, the grower must watch the hogs, keep them in healthy quarters, and keep them growing and gaining steadily. He must also study the market and as near as possible, sell at a time when both the hogs and the market look good.

Pigs arriving in March or April can be made ready for market by the early part of winter or late autumn, and the money received for them will seem more like "velvet" than the money obtained for average farm crops.

North Dakota should excel in meat-producing animals and dairy products, and the future prosperity of the state will depend very largely upon whether or not this phase of agriculture is pushed by farmers.

Hogs, Hogs, Hogs

By J. H. Worst, President, N. D. A. C.

There is perhaps more money in raising and fattening hogs, taking all things into consideration, than can be made from any other kind of livestock. Compared with swine, cattle and especially dairy cattle, are very profitable, but they require more work. Horses are profitable but require more capital and time to get started and to realize on the investment. All kinds of livestock, however, are subject to disease, but the same may be said of grain, vegetables, and fruit trees. Eternal vigilance, therefore, seems necessary at all times and in every division of agriculture. In the last analysis, however, livestock as a rule are less subject to climatic or diseased conditions and financial loss liable to occur, where proper care is exercised, than where the farmer depends entirely upon wheat and other cereals.

Hogs breed rapidly and mature, ready for the market, in less than a year. Moreover, there is always a ready and remunerative market for pork, and hogs' feed in abundance can be produced to the actual advantage of the farm crop in general. In fact the country has long suffered, on account of weeds, for a cultivated crop such as corn, to clean them out. The cultivation of corn, in other words, clears the land of weeds and provides hog feed, both of which tend to make farming more profitable. The advent of acclimated corn, and the raising of hogs as a necessary incident, makes farming in this commonwealth a half more certain and as much more profitable, than where wheat alone is relied upon for the annual income.

The fact that hog cholera ravaged some sections of the state the past year should not discourage farmers from raising swine. These and similar drawbacks are bound to occur at times regardless of the kind of livestock one is raising or the sort of grain crop that seems most popular.

With the present and prospective future shortage of meat-producing animals the country over, no farmer

is likely to make a mistake by engaging in raising hogs unless such animals are not to his liking.

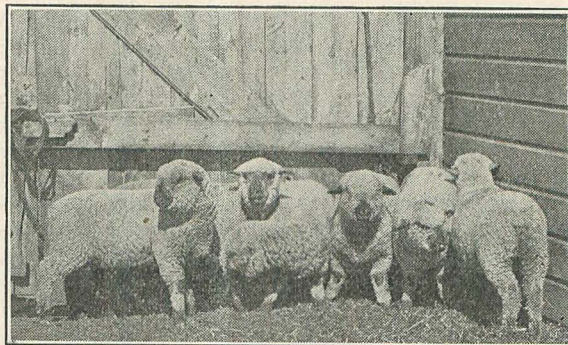
Another fact that favors the breeding of swine is the small expense of getting started and the comparatively cheap buildings necessary to house them; nevertheless their quarters should be perfectly sanitary.

WHY HAS NORTH DAKOTA SO FEW FLOCKS OF SHEEP

Robert E. Strutz, Bismarck, N. D.

This question the writer has often asked, but so far it has not been answered to his satisfaction. I believe that most of the North Dakota people by this time realize that we must have more livestock on our farms

Registered Shropshires on farm of R. E. Strutz in Grand Forks County



Lambs three and one-half months old.



Two two-year olds and two yearlings.

Hogs will thrive on clover, alfalfa, barley, rape, etc., in the green state, and also will consume with profit grains otherwise unmarketable on account of being off color or damaged by excessive moisture.

or else we will go backward. But few seem to realize that sheep are the best paying stock we can keep. Milk cows, beef cattle and hogs are good, and quite a little attention is given to chickens at many of our farm con-

ventions, but little or nothing is said about sheep. If sheep are properly kept they bring better returns for the average farmer than any of the other stock mentioned.

For one thing they make less work. We feed our sheep all winter outside. There is no cleaning out of barns in winter. Their building need not be expensive, simply good dry sheds, where they may go in and out at pleasure is all that is necessary.

Then feed can be used which is of very little value to other stock. Weedy (not mouldy) hay is fine for sheep. Corn fodder is excellent. If your summer fallow is full of wild oats, cut just before plowing. This will give you fine sheep hay. Screenings are very good, even the fine pigeon grass seed makes money for you with sheep.

In addition there is the value they are to the land. A pasture that is used two years for sheep will bring about double the amount of grain for the next three years as will summer fallow, and your land will be cleaned up better than in any other way.

True, sheep need clean water, shade in hot weather and shelter in stormy or wet weather and good care at lambing time; but in comparison with the work other stock acquire, this is very little.

Prices have been somewhat low the last two years, but they will certainly be higher for the next three years than they have been in the last twenty-five.

Brother farmer, a good flock of sheep will mean good farms, and good farms will mean more comfort and wealth. Get into the business.

FARMERS' SHIPPING ASSOCIATION

The farmers of the southern part of Steele County have organized as the South End Farmers Shipping Association. The annual meeting was held at Hope February 27th. The treasurer's report brought out the fact that they are organized for \$25,000 in shares of \$5.00 each, that there are present 79 members and that they have since June handled 26 carloads of stock, 25 of which brought in \$25,482.83. The money received for the other carload was divided up among the owners without passing thru the association. A commission of 5 cents per 100 pounds is charged for handling the stuff in less than carload lots. In carload lots the charge is one cent per 100 pounds.

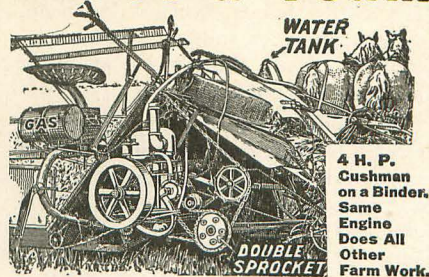
The serum club is made up of members of the association who have put up a dollar to make a fund with which to buy serum to keep on hand in case of an outbreak of hog cholera. Seventy-five have joined this. This quantity of serum kept on hand was found very valuable as in many cases hog cholera was discovered on Saturday. This made it too late to have any serum sent in before Monday which would have increased the loss.

Mr. Nelson, the county agent, treated 1209 hogs with serum. All of these but 90 were sick at the time the serum was injected. Yet 79 per cent of the hogs were saved.

Another feature of the annual meeting was the banquet. The farmers invited the business men and their wives to attend. In all 553 people partook of the feast. The Sherbrooke band, which is an all farmers' organization furnished the music.

The shippers' association held a short course lasting four days. Such

Saves a Team

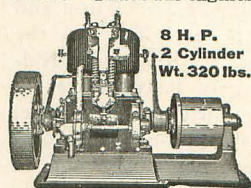


Cushman Binder Engines

For All Farm Work

Thousands are in use in the Northwest, doing all-purpose work, that were bought for binder use. A 4 H. P. engine that will stand up on the binder will deliver the goods on any stationary job. Cushman Engines are Throttle Governed and run easily and quietly. May be run at any speed—speed changed while running. Direct water circulating pump prevents overheating, even on all-day run. Equipped with Schebler Carburetor and Friction Clutch Pulley. Very light weight and easy to move from job to job. 4 H. P. weighs only 190 lbs.; 8 H. P. only 320 lbs. Sizes 4 to 20 H. P. Not a cheap engine but cheap in the long run.

Iver A. Madson, Wheatland, N. D., writes: "I have six engines and the Cushman is



the best. It does not jump like a heavy engine. On the binder it is a great saver of horse flesh. It will do all you claim and more too." Ask for free engine book.

CUSHMAN MOTOR WORKS
881 North 21st Street
LINCOLN, NEBRASKA

10 Good Size Packets SEED

Northern Grown, Thoroughly Tested, Reliable, Fresh, the "Sure Grow" kind, worth \$1.00. Cost you only 12c. That's all—mailing expense paid by us.



Beet, Best first early favorite. Cabbage, Best early, sure header. Carrot, Best table variety. Cucumber, Extra early white. Lettuce, Tender—always good. Onion, Great yielder—best red. Parsnip, Best, smooth and sweet. Radish, Scarlet Turnip, white tip. Tomato, Best extra early, smooth. Turnip, a favorite table variety. Send us 12 cents, stamps will do —with each order we include a copy of Good Poultry, our quarterly magazine, devoted to special crops—also a copy of our new book, Intensive Farming. Write tonight. Shorewood Farms Co., Saugatuck, Mich.

FARGO FOUNDRY CO., Fargo, N. D.

The Largest Foundry Machine Shop and Boiler Shop in the Northwest. A large stock of Structural Steel and Iron always on hand. Full Line of Blacksmith Tools for Farm use. The Biggest plant in the Biggest Little City in the world.

We make a specialty of modern Fire Escapes. Best Tools and Skilled Workmen is the secret of our success. While in our city call and see us and judge for Yourself.

Oxy-Acetylene Welding in connection.

End of North Bridge, N. P. Ave.

subjects as corn, alfalfa, crop rotation, dairy cattle, horses, beef cattle, sheep, hog cholera, with judging and demonstrations of all the classes of stock and fruits were taken up.

The farmers were very much interested in all these discussions and particularly so in the different phases for improving their stock. The farm women also held a short course of their own during these same four days. They took up such subjects as feeding and clothing children, the farm garden, vegetables, textiles, home nursing, meat cutting demonstration, savory dishes, home decorations, cooking meat, cooking for invalids, needs of the county superintendent and a lecture by President McVey of the University of North Dakota. Both the men's short course and the one put on by the ladies was financed by selling tickets, so that everything that they did was financed by the farmers and their wives. Mr. A. E. Nelson is county agent in Steele county. He has been largely instrumental in the forming of the shippers association and of its subordinate activities as the men's short course. Mrs. A. E. Nelson has been largely instrumental in developing the women's short course. Another of the things he has accomplished is the securing of a room in the city hall for a rest-room that can be used by the farmers' wives when they come to town. The meetings were held in the city hall. The first floor was fixed up with seats and a judging floor on to which the stock were brought for the demonstrations.

The ladies held their meetings in the assembly room above.

The shipping association is doing much to bring the farmers and the business men together.

HOW TO ERECT SMALL CONCRETE BUILDINGS

The present insistent demand for the substitution of durable, sanitary and fire-resisting materials for those not possessed of these properties has been a pronounced factor in hastening the adoption of concrete. The change means impervious and monolithic structures as opposed to those consisting of the more familiar types of

masonry with their attending wooden features of combustible nature, the latter also affording refuge for much that is noxious and unsanitary. This enduring method of construction is now applied to all parts of buildings in order that there may be a practical elimination of maintenance cost.

Small buildings for one purpose or another are always required upon the farm. These structures include poultry houses, hog pens, smoke houses, wagon houses, garages and buildings designed for storage purposes. If they are built of masonry or frame, the services of experienced workmen are usually required unless the structures are of the rudest type. The purpose here is to describe briefly a method of constructing, without the aid of mechanics, small concrete buildings for some of the uses specified. Dimensions may be increased or reduced as occasion requires. Where enlarged upon and supplied with proper conveniences, a building of this character would answer admirably for a small residence. If the natural color of the concrete is objectionable, it may be coated with a wash in any color desired, thus making these small structures a picturesque as well as useful appurtenance to the main buildings of the farm.

The Foundation

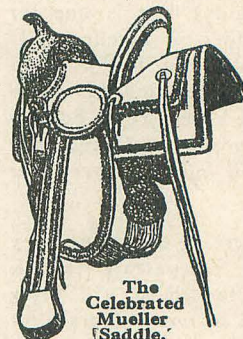
Let it be assumed that the building is to be 8 feet wide by 12 feet long with a height to the eaves of 7 feet, inside dimensions. A building of this size might be suitable for several of

NORTHWESTERN VETERINARY COLLEGE

Teaches a complete course in Veterinary Medicine by Home Study methods. Pay in small monthly installments. Become the Veterinarian in your community. One of our Graduates made \$800 in two months vaccinating Hogs against Hog Cholera. Veterinary Books free with course. Write for prospectus and special limited advertising offer.

NORTHWESTERN VETERINARY COLLEGE
Dept. D, Minneapolis, Minn.

A \$45 Saddle, \$36 Cash



The Celebrated Mueller Saddle.

Our latest Swell Fork Saddle, 14-inch swell front, 28-in. wool-lined skirt, 3-in. stirrup leather, 3/4 rig, made of best oak leather, guaranteed beef hide covered solid steel fork.

THE FRED MUELLER

Saddle & Harness Co., Dept. R, 1413-15-17-19 Larimer St. Denver, Colo. Send in your name for our catalogue now ready.



READ THIS

There must be a reason why there is such a demand for Justin's Boots. If you are going to wear boots, why not wear the best? Yours for the Best Cowboy Boots Made. Send us your address on a postal card and we will send you our catalogue, and self-measuring system.

GIVE US A TRIAL

H. J. JUSTIN & SONS
Mfrs. of Justin's Celebrated Cowboy Boots. NOCONA, TEXAS

Burpee's Seeds Grow

THE truth of this famous slogan is proved by thousands of pleased and permanent customers. The Burpee Idea of Quality First—"to give rather than to get all that is possible"—combined with efficient service, has built the world's greatest mail order seed business. We deliver seeds free by parcel post, and have not advanced prices because of the war. Write today for Burpee's Annual, the "Leading American Seed Catalog" for 1915. It is mailed free.

W. ATLEE BURPEE & CO., Burpee Buildings, Philadelphia



Pioneer Nursery, New Ulm, Minn.

GROWERS OF HARDY STOCK FOR THE NORTHWEST

Grapes produce more fruit than any fruit producing plant, occupying the same space.

Our Trio of hardy grapes are "Wonders." Bear annual crops without protection. Should be planted as far south as where Concord and others need protection. Late bloomers. Early ripe. Are being tested at Winnipeg, Man., and Indian Head, Canada. Ask for descriptive circulars and our catalog.

PIONEER NURSERY, NEW ULM, MINN. W. Pfaender, Jr. Prop. AGENTS WANTED.

DAKOTA WELDING & MFG. COMPANY

Large Welding Plant and Machine Shop

Expert welders and machinists of ALUMINUM gear and crank cases; manifolds and housings; CAST-IRON and cracked sectional boilers; cracked or broken cylinders or water jackets; STEEL frames or any broken parts of automobiles or other machinery. We weld cracked steam boilers with our large portable plant at your home.

201 FIFTH ST. NORTH

Phone 926

FARGO, NORTH DAKOTA

the purposes mentioned above. The foundation should be 12 inches wide and 3 feet deep, which will carry it below frost line. Mark on the ground a rectangle $7\frac{1}{2}$ feet wide by $11\frac{1}{2}$ feet long. Outside of this rectangle mark a larger rectangle $9\frac{1}{2}$ feet wide by $13\frac{1}{2}$ feet long. This will leave a space of one foot between the lines all round. Dig between these lines to a depth of 3 feet. This forms the foundation trench. The concrete for the foundation should be mixed in the proportion of 1 part Portland cement, $2\frac{1}{2}$ parts sand and 5 parts stone or gravel. Fill in the foundation trench with concrete to ground level, being careful to prevent earth from the trench walls from falling into the concrete. The top of the foundation should be brought to the surface of the ground and made perfectly level. To insure this test it with a carpenter's spirit level.

The Walls, Windows, and Doors

The walls of a building of this size will need to be only 6 inches thick and they should be erected on the center of the foundation, leaving 3 inches of foundation on both sides. The forms can be made complete, and, if more convenient, can be assembled flat on the ground and then raised into position. The wall forms should be made of 2 x 4-inch studding placed upright and spaced about 2 feet apart. Upon this studding should be nailed, horizontally, 1-inch boards. These boards will be next to the concrete and must be fitted together, so as to insure a tight joint, and if it is desired to give a very smooth surface to the finished wall, the joints should be carefully matched. The forms, to prevent them from spreading, are tied

by means of twisted wire passing between the 1-inch boards and around the upright studding, and for window openings a rough frame made of 1-inch boards, 6 inches wide, should be set in the forms at the proper location. Sometimes, after the forms have been filled with concrete to the height of the windows, the window frame itself is placed in the form and the concrete cast around it. The openings for doorways should be made in the same manner. As soon as the forms for the walls—both the inside and outside forms—are in place and made plumb, the concrete can be deposited between them. The top surface of the concrete previously placed in the foundation should be rough but thoroly clean and very wet in order that a good bond between the concrete in the foundation and the concrete in the wall will result. To prevent the development of cracks in the walls it is a very good practice to reinforce them with fence wire or light rods, running in both directions. This is not absolutely necessary, however,

For Sale Choice Big Type Poland

China Gilts, Sired by Monro's Jumbo 3rd and Giant Rupert, bred to Dignan's Chief and Miller's Big Chief for March and April farrow. I am booking orders for spring pigs to be shipped at weaning time. Pedigree furnished. Call on or Write

J. A. DIGNAN

Waverly, : : Minn.

SEED CORN

Direct from the grower. The famous Minnesota No. 13. Germination test 95 to 100 per cent. Strong, Vigorous seed. Shelled and carefully graded. Write for sample and price. Good fodder seed corn at \$1 a bushel. I am also booking orders for Chester White boar pigs, of spring farrow, to be shipped when three months old.

M. E. HOFF

R. R. 1, Hanley Falls, Minn.

Guaranteed North Dakota Grown Shrubs for Hedges Evergreens Small Fruits

Caragana—the Siberian Pea-Tree—the best by test for Hedges in the Northwest—is a sturdy, thick-growing, upright shrub and largely used for Hedges. We have propagated a large stock of Caragana as well as other Hedge-Plants, such as Honey-suckle Dogwood, Buckthorn, Lilac, Spiraea, Russian Olive and others and offer them for spring delivery.

Evergreens—we raise them by the millions from seed collected specially in the Black Hills and Rocky Mountains. They have grown here unprotected and have been twice transplanted, insuring a strong and bounteous root-system. They are acclimated and hardy and we recommend them for ornamental and permanent plantings.

Small Fruits—Currants, Gooseberries, Raspberries and Juneberries—we also raise in large quantities. We propagate our own stock and send you extra-size plants of the best quality. We have 200 acres in Fruit Trees, Forest Trees and trees for city planting. Planting Guide and Catalog on request.

DEVILS LAKE NURSERY

DEVILS LAKE, NORTH DAKOTA

BERG'S ROPE MAKING MACHINE

Halter Ropes 2 Cents Each MADE FROM BINDERTWINE WITH THIS SIMPLE MACHINE. NO LOOSE ENDS TO RAVEL.

Makes All Kinds of Rope

Halter Rope or cow ties that cost 15 cents at the store can be home-made at a cost of two cents with an Ideal Rope Machine.

But the saving in cost is not the only advantage. Binder twine makes better rope than you can buy, because the longest and best fibre is always used in making binder twine. Twine has to be strong to hold bundles of grain and, therefore, makes a strong, light pliable rope—**Ideal Rope**. Factory-made rope has short fibres, is not so strong and snarls up when wet.

Farmers who raise grain generally have on hand a few balls of binder twine, but rarely have a supply of rope. Or, if there is rope on hand, it is frequently the wrong size or length. By having an Ideal Rope Machine you can in a few minutes make a rope just the size and length you want. No need to drop your work to get rope from town. You can use odds and ends of twine that would otherwise go to waste.

THE IDEAL ROPE MACHINE COSTS ONLY

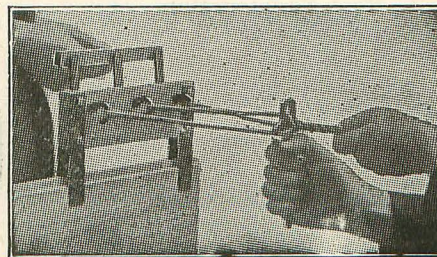
\$1.50

and will return you a profit of 200 per cent every year and save lots of time and bother. We guarantee the Ideal Rope Machine to be made of good material and to last a lifetime with ordinary use. If any purchaser of our rope machine can, with ordinary usage on a farm, wear out the machine, we will furnish another free of charge upon the return of the old machine. We could not make a fairer offer than this and you cannot afford to be without the rope machine another day.

Send \$1.50, check or postal order and we will send you the IDEAL ROPE MACHINE at once.

Agents wanted in every county. Write for **FREE!** descriptive circulars at once.

Berg Rope Making Machine Company, - Dept. NF. Madison, Minnesota



for a very small structure, but in any case it would be well to place in the corners where the walls join, light rods bent in the shape of an "L". These rods should be 2 or 3 feet long and placed about every 12 inches of height. The frame for the doorway should be placed in position before the concreting is started. It is sometimes the custom to tack lightly to the door frame a strip of wood tapered so that its larger side is in the concrete. When the rough door frame is removed this strip remains in the side of the door and can be used for fastening the door hinges. Some prefer to dispense with this strip of wood. They drill directly into the concrete wall in providing for hinges.

Mixing and Placing the Concrete

The concrete for the walls should be mixed mushy wet and in the proportion of 1 part Portland cement, 2 parts sand and 4 parts stone or gravel. In placing the concrete spade it thoroughly with a thin board paddle, thrusting the latter between the forms and the concrete in order that the stone or gravel may be forced away from the forms, which will leave a smoother surface than would otherwise result. This not only allows the rich mortar to flow against the forms, but prevents the formation of air pockets and projecting stones at the surface of the wall. It will be found convenient to place the concrete until it reaches the height of the window-sill. The window frames are then placed and the concreting continued until the height is about 2 inches above the top of the windows. Then, in order to strengthen the concrete over the window openings, lay two 1/4-inch steel rods over each window. These rods should be long enough to extend about a foot on each side of the window space. In a similar manner rods should be laid over door openings, these rods to prevent any cracking of the concrete over the openings. The balance of the concrete is then deposited until the height of the eaves is reached.

Roof Construction

On the top surface of the wall there should be imbedded vertically in the fresh concrete 1/2-inch bolts with the heads down. These bolts extend about 12 inches into the concrete and about 6 inches above. They can afterwards be used in fastening down the wooden sill to which the rafters are attached, if the roof is to be constructed of wood. Either a flat or a peaked roof can be used. If a flat roof, it is sometimes the practice to arrange for rectangular pockets in the top of the walls, into which the roof beams can be set. When a flat roof is to be constructed make one side of the

building lower to provide sufficient pitch for drainage. The forms for the walls should be left in place about one week and no weight should be placed on the walls for three weeks or one month.

If a concrete floor is desired, proceed as in the case of sidewalk construction, that is to say, put down a layer of cinders or gravel and place over this the concrete pavement. Make this of a 1 : 2 1/2 : 5 mixture of Portland cement, sand and stone. To prevent the concrete pavement from cracking divide it into sections or slabs, say 3 or 4 feet square, being sure that the joints extend entirely thru the concrete.

If a wooden floor is preferred, the beams or stringers may rest upon the 3-inch projection of the foundation walls.

From the Experiment Station

WILLOW CUTTINGS

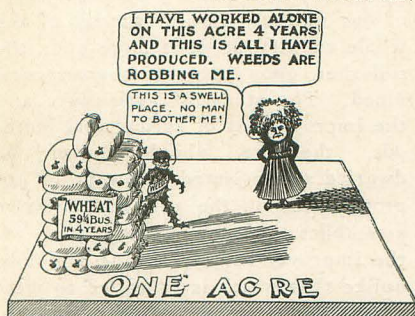
It has been found that the best size to make willow cuttings is 10 to 12 inches long and three-eighths to three-fourths of an inch thick. These results were secured at the North Dakota Experiment Station under North Dakota conditions.

TO PRESERVE EGGS

A good way of preserving eggs is the waterglass method worked out at the North Dakota Experiment Station. The solution is made up of one quart of water glass (can be secured at drug store) to ten quarts of water. Select fresh eggs and pack in a jar and pour the solution over them. Stale eggs can not be saved and they

may prove harmful to the others. The preserved eggs develop a little gas which is apt to crack the egg in boiling. This can be prevented by making a hole in the big end of the egg with a pin

WHEAT NEEDS HELP RETURNS FROM AN ACRE IN FOUR YEARS.



AVERAGE OF 15 YEARS WORK AT N. DAK. EXPERIMENT STATION.

CHECKS

The safest and most efficient method for handling money is by checks. When this method is used the money can be kept locked up in vaults where it is safe. If the check is destroyed the money is still safe. It can be made out so that it can only be paid to a certain person so it would be no good if stolen. Even if the check is made out to a certain party and one decides that he should not have the money payment can be stopped on it. A check has to be signed before it can be cashed so that when the paid check is received from the bank it is a receipt for funds paid out. If a check is passed thru several hands each one has to sign it so the check has a complete story of its travels on its back. All this safety and convenience is furnished by the bank and at no cost to the individual.

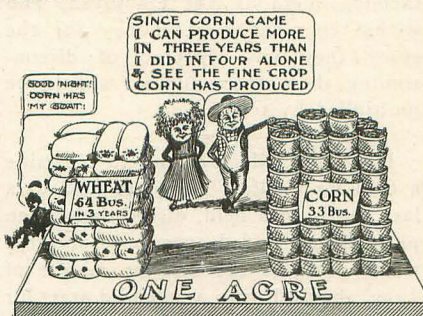
A few precautions need to be taken in writing a check. When writing the amount put the figures so close to the dollar sign that another figure cannot be slipped in between. Likewise in writing out the amount start at the beginning of the line and fill out the space with a wavy line or something so that nothing can be written in. Write plainly.

The check reads "pay to (space for writing name) or order." In case it is wished to have the check paid only to the person it is made out to, cross out the words, "or order."

Handling money by checks means having an account at the bank. This gives the person a standing at the bank, so that if a loan is needed it will not be necessary to establish one's standing. Furthermore, handling one's money by checks is the business way and it is a systematic way.

EFFECT OF DEHORNING

Records were kept of fourteen cows that were dehorned at the North Dakota Experiment Station. They fell off 25 pounds a day for the first two



COMPOSITION BY W.C. PALMER
CARTOON BY JOHN M. BAER

days or about a quart each. On the third day they were back to normal.

C-R-E-A-M

"THE FARMERS BEST CASH MARKET"
PAY DAILY—WRITE FOR PRICES

HEADQUARTERS
FOR POULTRY
AND VEAL

E. COBB CO.,
5 E. 3RD. ST.
ST. PAUL MINN.

MCKINLEY Potatoes for Sale

500 Bushels McKinley Potatoes, a sample of which took a prize at the contest recently conducted at Fargo. 1914 yield 160 bushels per acre on a 10-acre field. \$1.50 per bu. 10 or more bu. at \$1.25. Sacks free.

ED HAYFORD
Fessenden, - North Dakota



Have Gophers Eaten

Your Automobile?

Perhaps you've wanted an auto and couldn't afford one. Gophers have damaged your crops and robbed you of part of your ripened grain. One pair will eat or destroy a bushel of grain a year. 40-acre fields often harbor 1,000 of these pests. What they cost you would soon pay for a machine. Are you going to let these pests live another year? There's one sure way to destroy every one.

KILL-EM-QUICK

It Kills Gophers. It's the only way,—you can't trap or shoot enough to make any impression on the increase. But **Kill-Em-Quick Gopher Poison** will clean them out in a day. Its odor attracts them. The sweet taste suits them. The tiniest particle eaten kills instantly. It's the one **absolutely sure** way to destroy gophers, prairie dogs, squirrels, mice, etc.

Kill-Em-Quick is the most economical to use. It's the safest. There's no danger in preparing,—simply soak the grain over night, drain in the morning, pour the box of **Kill-Em-Quick Powder** in and stir thoroughly. Then drop a few kernels of grain into their holes. Next day every gopher in your field will be dead. Or, if you want to collect a bounty drop the grain four or five feet from the holes. No gopher will ever travel four feet after eating **Kill-Em-Quick**.

We unreservedly guarantee that Mickelson's **Kill-Em-Quick** is not only the cheapest gopher poison you or any other man can use, but the **most effective you can use at any price.** **Kill-Em-Quick** comes in three sizes: 50c, 75c and \$1.25; enough for 40 acres, 80 and 160 acres; enough to kill 1,000, 2,000 and 4,000 gophers. Backed by a cash guarantee. Full satisfaction or money back. Get it from your druggist. If he can't supply you, we send prepaid on receipt of the price. Send for FREE gopher book.



MICKELSON-SHAPIRO CO.,

26 N. 3d St., Minneapolis, Minn.



NORTH
DAKOTA
GROWN

SEED CORN

KILN DRIED,
SELECTED
AND TESTED

The past season has been one banner year in the production of high grade North Dakota Grown Seed Corn, stocks show almost perfect germination tests and you should take advantage of present low values by ordering at once.

Alfalfa, Clover, Timothy and grass seeds are reasonable in price this year, and our stock is of the very highest test and will prove their worth when harvest time comes. Your order should not be delayed if you want good seed. Send today for our 1915 catalog, free.

Fargo Seed House Dealers in strictly high-grade seeds.

FARGO

NORTH DAKOTA

North Dakota Farmer

Entered as second class matter in the postoffice at
Lisbon, North Dakota

PUBLISHED EVERY MONTH

W. G. CROCKER : : **PUBLISHER**
Lisbon, N. D.

E. F. Ladd, Editor FARGO, N. D.

BUSINESS MANAGEMENT, LISBON, N. D.

ASSOCIATED EDITORS

PROF. J. H. SHEPPERD, State Farm Notes.

PROF. W. B. RICHARDS, Livestock.

PROF. C. B. WALDRON, Fruits, Forestry,
Insect pests.

Remittances should be made by Drafts, Post-
office Order or Express Order.

Address all business correspondence to the
Lisbon office.

Vol. 16 MARCH, 1915 No. 9

The deeper the farmer goes into the soil the higher his success will be as a business man and producer.

The man who takes pride in plowing a straight furrow is very apt to take equal pride in all the rest of his farm operations.

The successful farmer must follow the plant down into the soil as well as follow it up from the soil. Too long have farmers thought horizontally. It is now time to do some vertical thinking—down as well as up.

The farm is both a home and a factory. Where it is treated only as a factory, as it often is, life is hardly worth the living; but where the home sentiment is emphasized as well as the production sentiment, contentment is usually found in abundance.

The growing interest manifested in livestock and silos bodes well for our commonwealth. Money judiciously invested in these mortgage lifters will draw more settlers to our state than all the immigration literature and hot air artists can induce to come hither.

The School of Forestry, located at Bottineau, is prepared to furnish trees of the right varieties at cost of taking them up with freight added. This generous offer should be taken advantage of and thousands and tens of thousands of forest trees planted during April and May.

Good roads will never become general until farmers come to some sort of agreement as to how they shall be made and kept in repair. As the farmer is most concerned in the ques-

tion of good or bad roads, it is up to him to do some tall thinking. Good roads seldom are cheap roads.

From all accounts the results obtained from the twenty-four demonstration farms are the most accurate and edifying of any of the better farming methods yet employed, and withal cost the least money for the story they tell. Instead of discontinuing them their number should be multiplied by ten.

Don't fail, Mr. Farmer, to set aside a field for alfalfa. A potato field or a last year's corn field, disced early then plowed deep and dragged two or three times prior to the first or middle of June, should insure a splendid start for an alfalfa field. The seed should be sown about June 1 or a trifle later to insure best results. Try it.

It is altogether probable that a good many farmers will go wheat crazy on account of the high price of that cereal. Notwithstanding the high price of wheat farmers had better be conservative as to acreage but make their "killing" out of a big yield from only as many acres as can be put into the best possible condition to receive the seed.

The excellent yields of Durum wheat last season, as compared with other wheats under similar conditions, should induce farmers to plant a liberal acreage this spring. The fact that Durum is more often at a premium than otherwise is also in its favor. Durum is somewhat rust resistant and is drought resistant as well, which makes it the safest cereal to bet on in the dryer sections of the state.

When every farm in the state contains ten acres of forest trees, carefully selected and planted in ground specially prepared, and these tree plantations have been given careful cultivation for five years, the state will be richer by as many millions as the thousands it will cost to plant and care for them. Let us hope, therefore, that a very large number of tree plantations will be started this coming spring.

The county agent work, started in North Dakota, is assuming large proportions in other states as well. Among the north central states employing county agents may be mentioned Illinois with 14; Indiana, 28; Iowa, 9; Kansas 9; Michigan 16; Minnesota 25; Missouri 14; North Dakota 21; South Dakota 3; Wisconsin 11; Massachusetts 17; New York 27; Pennsylvania 14; California, Ore-

gon and Washington 10 each; Colorado 9; Utah 7; Montana 6; New Mexico 5; and Wyoming and Idaho 3 each. Who says that the agricultural graduates will have to advertise for jobs?

The soil is the one permanent asset of our nation. The prosperity of the whole country depends more upon the soil than upon all other sources combined. The study of agriculture and the improvement of agricultural methods, therefore, should never be dwarfed or neglected for want of appropriations on the part of legislative assemblies. Money appropriated for the improvement of farming methods, unlike that which is expended to meet most other state needs, is in the nature of an investment that brings back to the state many times the amount that is expended. Hence money appropriated for agricultural colleges and experiment stations is the highest form of economy.

The general opinion of the farmers who attended the institute was that "it is worth \$25,000 a year for the next ten years to this county."—Bellevue Times.

Doubtless the Times stated the truth, nevertheless, to the unthinking mind it is a gross exaggeration. The slightest improvement in the breeds of livestock or the yields of grain readily mounts up into millions of dollars in a state so exclusively agricultural as North Dakota. And yet it is most difficult at times to secure the appropriation of the few thousands that bring back the millions, even though as intelligent a body of men as a legislative assembly has control of the funds. It would seem a simple proposition to increase the yield of small grains to the extent of one bushel per acre which would add not less than ten million dollars to the farmers' income.

TWO-YEAR SUBSCRIPTION FREE

From nine advertisements appearing in this issue the following sentence may be formed by taking a quotation from each: "We are glad to inform you that" "with each order we include" "farmers who raise grain generally," "specially in the Black Hills" "to replace the many young men who have volunteered," "the very best that money can buy," "full to overflowing with interesting" "descriptive literature including" "precious metals, in right proportions."

Simply name the advertisers in order and send to North Dakota Farmer, before April 5th.

When you send in your answer please write us what you think of the class of advertising we carry.

Pure Food Advertisers

The products advertised below are in compliance with the pure food law of North Dakota and of the highest grade
ASK YOUR GROCER FOR THEM.



**"Just
Splendid!"**

Our mothers know. They look for something more than pretty labels and cheap prices. Quality counts with discerning buyers. Hence the success of

NOKOMIS
Canned Goods

All varieties of delicious canned fruits and pure, wholesome vegetables—from the choicest orchards and gardens—are to be had in this well-known brand.

The
successful
merchant
gets a
good
thing—
and then
PUSHES
it.



**STONE-ORDEAN-
WELLS COMPANY**

"A Great House in a Great Location"

**Our Candies
Are Pure**

Chaney-Everhart Co.
Fargo, N. Dak.

"BUY"

"EAT"

HOME BRAND

Pure Food Products

"ECONOMY" "SATISFACTION"

Griggs, Cooper & Co.

MANUFACTURING
WHOLESALE
GROCERS,

ST. PAUL, MINN.

Main Offices:
CORNER THIRD AND BROADWAY

**DR. PRICE'S
JELLY
DESSERT**
NUTRITIOUS-WHOLESOME

One package, 10 cents, makes one pint of wholesome Fruit Jelly. All flavors from true fruits.

MONARCH BRAND



FOOD PRODUCTS

A GUARANTY OF PURITY. A WELCOME GUEST at every table where the HOUSEWIFE demands the BEST. THE MONARCH LABEL insures QUALITY in Coffee, Catsup, Pickles, Maple Syrup, Canned Goods or any article bearing the MONARCH BRAND of REID MURDOCH & CO CHICAGO.

Eat North Dakota Sweet Corn

Sanitary

PACKED BY
ONLY
FACTORY OF
ITS KIND IN
THE STATE.
SEALED IN
SANITARY
CANS AT
OUR
MODERN
THREE-
STORY
FACTORY



Delicious

NORTH
DAKOTA
CORN
EXCELS IN
SWEETNESS.

ASK YOUR
GROCER
FOR OUR
BRAND.

WRITE FOR
PARTICU-
LARS

Sheyenne Valley Canning Co.

Lisbon, N. D.

Livestock Department

FARM AND STOCK NOTES N. J. Shepherd

A perpendicular shoulder is a good draft shoulder.

Sheep are the quietest and easiest handled of all farm stock.

Generally a horse that is broad in the forehead is intelligent and kind.

Market value is not always in accord with food value as determined by the chemist.

Ordinarily it is a mistake not to feed the hogs the liquid before the solid foods.

With all classes of stock overfeeding will impair the digestive organs quicker than not feeding enough.

Look over the farm tools and machinery and see that they are in good condition for use when needed.

In selecting a brood sow remember that the size of her litter is an important factor in her profit.

The evenness with which a horse walks is one of the best evidences that the legs work in harmony.

The successful man of today is the man that is alive to all the little details of his business.

Smaller pigs are kept stunted if left to run with the larger, stronger ones by being crowded from the feeding trough.

No one ever failed in farming by doing the work too well or expending too much labor if expended judiciously.

In preparing early lambs for market remember that the more fleshy and fat they can be made the better price they will command.

Profit in any business depends upon success and success depends upon intelligent painstaking adjustment and execution of the varied details of that business.

Weeds, making the best out of them possible, are parasites not only on the soil and farm crops, but also on the revenue of the farmer.

Systematic arrangement and laying out of the work several days ahead will often show where time can be economized, especially in going from one job to another.

It is just as important to arrange the teams with reference to the disposition of the horses, as it is to pay attention to their relative size and strength.

Condition makes or unmakes the horse and on its proper conditioning

depends the development of its muscle and its power of endurance and on these depend its speed development.

While farm manure has some value for physical improvement and a larger value for its power to liberate plant food from the soil it should always be borne in mind that the great value of farm manure is due to the plant food it contains.

There is no longer any question but that poultry is profitable even when kept alone, but much more so when the business can be combined with some other branches of work so that each department fits into the other and the waste of one is utilized by the others.

In any department of farming, it is the man who produces crops or products below the average who is losing money himself, and who, by crowding the market, with products that must be sold, causes others to lose.

In selecting eggs to hatch, use only medium-sized and perfectly formed eggs as those abnormally large or small, or will-shaped, indicate lack of good condition in the hens that laid them, and of course eggs from such stock should not be set.

A system of diversification and rotation suited to the needs of the climate, the soil, and the market, not only keeps the land at work, but improves soil fertility, increases crop production, decreases insect-pest depredation, gives more regular work for teams and labor thruout the year.

Mainly the disposition of a horse is bred in him; he may have behind him long generations of heredity that has had meanness in it, and it will crop out, but a good deal of the disposition of the horse is a matter of development by the people who handle him and educate him so that in the education of a horse particular attention should be paid to his disposition.

HOW TO LOSE MONEY IN DAIRYING

By following these rules any dairy farmer can insure the failure of his business, says Prof. G. W. Barnes, farm adviser on livestock of the University of Arizona:

1. Use scrub bulls. This will run down any herd in quick time.
2. Let the bull run with the cows. This will make their milk yield fall off

CLASSIFIED ADS.

One Cent a Word

Small advertisements will be classified under appropriate headings at the low price of one cent a word for each insertion. Cash must accompany all orders. Each initial, or number must count as one word. TRY IT HERE.

LIVE STOCK

RED OAK DUROC GILTS

I have 50 finely bred gilts for sale, all dating back to champion bred sows and boars, and bred to such boars as Johnson's Defender, Golden Model Wonder and Red Oak Col. All champion bred. Write us for prices on these gilts. Get a start in these fine hogs and let them make some money for you. Farm adjoining Oakes. H. J. JOHNSON, : : OAKES, N. D.

FOR SALE: Chester White Gilts Bred to Dakota's Pride, a son of Sweepstakes No. 28006, the hog that weighed 1260 pounds. Also Pigs at weaning time.

THE PRATT FARM

Geo. A. Pratt, Prop. : Cooperstown, N. D.

Minnesota Highest A. R. Record Guernseys

Twenty cows average 514 pounds fat, equal to over 615 pounds of butter
World's Greatest Herd of A. R. Red Polls
Whole Herd averages 422 pounds fat, equals to 506 pounds of butter
Bulls for Breeding Clubs to Suit All Pocketbooks
Jean Du Luth Farms, Inc., Duluth, Minn.
Geo. P. Grout, Managing Owner

For Sale. Registered Holstein Bull 11 months old, Three-fourths white. Of Pontiac Korndyke breeding. Also a few bull calves of same breeding. John Walsh, Northfield, Minn. R. 4.

DURROC JERSEY GILTS AND WHITE HOLLAND TOMS
Am offering only my choicest gilts bred to Crimison Model 4th for March, April and May farrow. Pedigrees furnished. Roy W. Jacobs, Wadena, Minn.

Red Polled. If you are looking for choice bulls all ages, write, Howard H. Capener, Erie, N. D.

FOR SALE: Duroc-Jersey Boars including Herd Boar; Shropshire Ram Lambs; Barred Plymouth Rock, and Single and Rose Comb R. I. Red Cockerels, Dark Muscovy Ducks.
E. W. SMITH, : : BUFFALO, N. D.

Pure bred Percheron Horses and Shorthorn Cattle Stock for sale. Nels Knutson & Sons, R. 1, Fullerton, N. D.

THE PLEASANT GROVE FARM at Holmes, Grand Forks County, sells registered Shropshire and Oxford Rams and Ewes; also Polled Durham Bull Calves. R. E. Strutz, Bismarck, North Dakota.

205 DIFFERENT FOREIGN STAMPS FREE
If you remit 25 cents for six month's subscription to "Mekeel's Stamp Weekly," 530 East Boston, Mass. If preferred we will send 101 different United States.

Meadowlawn Farm. The largest breeders in North Dakota. Percheron Horses, Shorthorn Cattle, and Berkshire Hogs. Where quality counts. Address: A. H. WHITE, - - - Kramer, N. D.

For Large Yorkshires of either sex and bred gilts, address L. A. Knoke, Badger Den Stock Farm, Willow City, N. D.

Choice Poland China Hogs always on hand. Bred Gilts all sold. Register now for spring pigs, either sex; prices right. Thos. Forbes, Petersburg, N. D.

HIGH GRADE LIVESTOCK: Clydesdales, Double-standard Polled Durhams. Farm Horses and Drivers. Leal Stock Farm, - - - Leal N. D.

ENVILLA STOCK FARM

Envilla Stock Farm, Cogswell, N. D. will quote you special prices on Angus Cattle, Shetland Ponies, Duroc Jersey Hogs, Wolf Hounds, Collies, Rat Dogs and other breeds, Angora Cats. All varieties of chickens; turkeys, geese, ducks, guineas, pheasants, rabbits, ferrets. Pets. Live Foxes, Skunks, Mink and Badgers.

Bixby's Red Polls

of A. R. Breeding

My herd bull J. D. Merryweather No. 24396 is from 1400-pound cows and is getting the size in my herd. His dam is a full sister to the World's Champion Two-Year-Old heifer. His first three dams average close to 400 pounds butterfat in one year.

J. S. BIXBY, : : LISBON, N. DAK.

and their calves come when least desired.

3. Do not test the cows for milk production or butterfat. In this way the poor cows will lose enough money in a year to buy several good ones.

4. Keep only the heavy eating cows which produce little milk.

5. Raise only the heifers from non-producing cows.

6. Feed sour and rotten feeds.

7. Do not supply pure water, but make the cows drink out of mudholes.

8. Furnish no shade during the summer months.

9. Have no shelter for the cows in cold and inclement weather. This will reduce the milk flow from 35 to 50 per cent.

10. Milk at irregular intervals.

11. Hire rough milkers who do not milk thoroly.

12. Get in the cows with the assistance of dogs.

13. Feed only enough to keep the cows alive. This will surely stop the milk flow.

14. Never pay any attention to udder troubles. Beautiful cases of garget may thus be developed.

15. Buy cheap dairy cows anywhere. In this way one may succeed in introducing contagious abortion into the herd and community.

16. Keep the dairy buildings and utensils as dirty as possible. A very inferior quality of milk may thus be produced.

WAR WILL IMPROVE AMERICAN HORSES

Inestimable improvement in the breed of American horses as the result of the European war is predicted by George F. Dickinson, former Texas ranger and friend of Theodore Roosevelt. Mr. Dickinson has just completed a tour of the horse-breeding districts of the United States in search of blue-blooded show animals for several millionaire horse lovers, and knows the condition of the horse industry probably as well as any man in the country.

"The European war is probably the greatest thing that ever happened for the American horse," he said. "It has stimulated horse breeding of the better kind in this country already. Foreign buyers are only getting the culls and seconds, inferior animals, without which we can get along very nicely. At the present time the horse market is not seriously affected as the result of the war, but I do expect in the near future to see threatening demands made on the better class of American animals. Europe's supply of horses will be so thoroly exhausted in

a short time that it will take many years to replace the animals taken as the war's toll. Germany is seriously affected by a horse shortage right now. I know of a number of large horse and mule dealers who are buying hundreds of higher grade animals with the purpose of holding them for bigger prices, which are bound to come."

HORSES AND SPRING WORK

L. Van Es, N. D. Exp. Station

There would be no special problem in starting our horses at spring work were it not for the fact that during the winter season they were condemned to a certain degree of inactivity. This is for a horse a rather unnatural condition, not infrequently heightened by certain practices in regard to feeding and management according to the ideas and customs of various owners.

Those ideas and customs fluctuate between two extremes. In the one case, the horses are neglected and but little thought of again until spring work comes once more in sight. Horses are compelled to "rustle" for themselves, to subsist on straw or whatever hay they may pick up on the range. It is a plain case of "root hog or die," and while it may be intended as an application of the law relating to the survival of the fit, any thoroughgoing farmer, unless compelled by very bad circumstances, will condemn the system.

On the other extreme we find, that the horses at the close of the season's work are thought of so much, that they are being overfed and pampered

DUROC JERSEYS Gilts out of such sows as Golden Model Queen 6th, Model Beauty and other sows as well bred as could be bought at the sales last winter. Write H. N. HOYME, Jasper, Minn.

HOLSTEIN Cows, Heifers and Young Bulls. All ages. Write Envilla Stock Farm, Cogswell, North Dakota.

MAPLE LODGE LARGE YORK-SHIRE

March and May pigs, \$10 up, also a few fall pigs, stock of good type and strong bone. Bourbon Red Turkeys, \$2.50, and up. Partridge Wyandottes, (winter layers) stock and eggs, \$1.50. Edward Klebaum, Egeland, N. D.

The Jersey



comes into maturity early, is long-lived and is often found making records even to advanced age. She stands above all other breeds for economic production. Shall we mail you free a good book on the Jersey? THE AMERICAN JERSEY CATTLE CLUB, 324 W. 23d St., New York City.

FOR SALE. Short Horn Bull, 18 months old, Roan; weight about 1000 pounds. Good breeding. J. M. Crawford, Wahpeton, N. D., R. 3.

MISCELLANEOUS

WANTED. Live Foxes, Skunks, Mink and Badgers, any time. Envilla Stock Farm, - - Cogswell, N. D.

POTATOES go 300 bushel to acre **CORN** 60 bushels to acre in HUBBARD COUNTY. Rich clover and dairying lands, near beautiful lakes, good towns, schools, roads, at very low prices. Write today to Miller Bros. Land Co., Park Rapids, Minn.

WANTED to hear from owner of good farm for sale. Send cash price and description. D. F. Bush, Minneapolis, Minn.

Grimm Alfalfa Seed from a field 20 years old. Price 50 cents per pound. Gustav T. Rasche, Westbrook, Minn.

ALFALFA SEED DIRECT.

Sample and growers price on application.

J. L. MAXSON, BUFFALO GAP, S. D.

FOR SALE. Medium Red Clover and Primost Flax.

J. M. Crawford, R. 3, Wahpeton, N. D.

FOR SALE. One Emerson 10-foot Double Disc with drill attachment, as good as new, \$100. Briggs & Hoyt, : : : Linton, N. D.

Agents Wanted to sell our beautiful Art Pictures. They sell everywhere, in farm or city homes, at 25 cents up. Big profits. Beautiful sample, (size 16x20) and agent's terms, only 15 cents, post paid. Order at once and be the first in your territory. The Art Shop, Dept. A, Hendrum, Minn.

	BOOK ON
	DOG DISEASES
	And How to Feed
	Mailed free to any address by the Author
America's Pioneer Dog Remedies	H. CLAY GLOVER, V. S. 118 West 31st Street, New York

Which Of These?

BOYS AND GIRLS, HERE IS A CHANCE TO OBTAIN YOUR CHOICE OF THE FOLLOWING FREE. IT IS EASY.

Stem-Winding Watch.....[]
Folding Lunch Box.....[]
Panama Knife.....[]
Rotary Subscription.....[]
Six-Inch Pliers.....[]
Fountain Pen (Self-Filler 14-K)....[]
Self-Sharpening Shears.....[]
Crocodile Wrench.....[]
Needle-Book (140 assortment).....[]
Sheet Music (Vocal or Instrumental)[]
Sewing Awl (For leather).....[]
Rugby Football.....[]
Catcher's Mitt.....[]
League Ball.....[]
Basket Ball.....[]
Box Kite.....[]
Roller Skates.....[]
Pathfinder Subscription.....[]

Put a cross opposite your choice.

W. G. CROCKER, LISBON, N. D.

Name.....

Address.....

during the winter season of inactivity. There is perhaps an abundance of feed on hand, the horses have nothing else to do but eat, and the owner may be one who has a special fancy for fat horses. It is surprising how many people there are to whom a fat horse means a nice, good looking horse. A fat horse may be a sign that its owner is kindly disposed and means to be good to his stock in general, but it is not always an evidence of wisdom in management.

With a view to spring work both extremes are wrong. In the one case, horses are weak on account of under-feeding and in the other they are the same owing to being too fat. In preparing the first type for spring work, the animal must be fed up to a certain degree of thriftiness before the beginning of work, but this does not mean that this latter type must be correspondingly starved. In the case of the horse which faces the heavy spring work in too fat a condition, it becomes more a matter of working the animal at first with a considerable degree of caution. The fat horse must be used

sparingly at first and be given a chance to gradually harden up to its working form.

From the above it may be inferred that the proper time to begin preparing a farm horse for spring work is with the close of the preceding season. This is practically the case. We must remember that a horse which suddenly is taken from work is confronted with a condition fully as unnatural as the one which from absolute idleness is at once required to do heavy work. Two factors are conspicuous in this, the one is the amount of muscular energy the animal body is accustomed to produce and the other is the amount of feed upon which the performance is based, muscular energy being nothing but one of the end-products of digested and assimilated food.

This adjustment is most readily performed, when the change comes about gradually. Sudden changes always jar the delicate construction of the animal machine, and when we change the horse's regime from hard work to idleness or back from idleness to hard

work our first duty is to make this change a gradual one.

The idle horse does not require the same ration as the horse which has to work hard every day, in fact, it is often detrimental to crowd a ration into an idle horse. There must thus be a considerable reduction in the ration after the horses go into winter quarters, say a reduction of fifty percent, in the grain ration, leaving the roughage as it is.

While this reduction may be made on the first day the horses are idle, we believe it better to gradually reduce the grain fed during the last three or four days when the horses are at work, in such a manner that on the last day's work the horses receive about what is intended for them during the winter.

The horse's condition during the idle winter season, should neither be too lean nor too fat. There should be enough feed to maintain such a condition and those who can find a little work for their horse stock during the winter, will have the least difficulty in keeping their horses in good shape.

Auctioneering

COL. H. A. KINNEY

Real Estate and Registered Stock Specialist—22 years experience. Write for dates and terms Breeder and shipper of Chester White hogs. Larger blood lines for 1915.

Milnor, - - - NORTH DAKOTA

Wanted. Responsible representative in each county. New Combination. 12 tools in 1. Sells at sight to farmers, teamsters, contractors, etc. Weight 24 pounds. Lifts 3 tons, hoists, stretches wire, pulls posts. Many other uses. Free sample to active agents. Easy work. Big profits. One agent's profit \$45.50 in one day. Another \$1000 in Dec. 1914. We start you. Write today for Big Color Plate. Quick action secures exclusive sale. Harrah Mfg. Co., Box M, Bloomfield, Ind.

Young Man, would you accept a tailor-made suit just for showing it to your friends? Then write **Banner Tailoring Co., Dept. 6, Chicago,** and get beautiful samples, styles and a wonderful offer.

TREE BUYERS. WARNING: BUY GOOD TREES. Plant for present and future. Do not buy cheap, unprofitable trees or shrubs. They not only fail to bear profitable crops but occupy ground that could be producing a splendid profit. Experience shows that poor nursery stock is expensive at any price. Pay a little more; be assured of a permanent income. **Home Grown, Strong, Well Rooted Trees.** We grow our own stock and under the strongest possible guarantee sell strong well rooted trees, grape vines, shrubs, roses, etc. We sell direct and our prices are absolutely as low as first class stock can be sold for. **New Apple Record.** From one of our Winesap Apple Trees one of our customers obtained 18 boxes of No. 1 fruit which sold at \$1.35 per box. A few trees of this kind are worth more than dozens of the barely productive grade. **Catalog Free.** Before buying get our free catalog, which pictures and describes our nursery stock-trees that are real money-makers for the grower. Sent on request. Write today.

KANSAS CITY NURSERIES
400 Reliance Bldg. - Kansas City, Mo.

Alfalfa Seed—Milk River Grown—Genuine Grimm pale blue blossom, 35c per pound (purity 99, Montana; 2nd grade 10c. Send 15c for sample package containing 2 oz. Montana, 2 oz. Grimm, 5 seeds Montana Yellow Blossom. **James Rannel (Grower), Harlem, Montana, R. R. 5.**

SALESMEN
SALESWOMEN
Our representatives are earning \$50 to \$150 per week. Write quick for sample and territory. It's selling like wild-fire. Everybody's a Customer. **Hytee's Factories, Majestic Bldg., Indianapolis, Ind.**

ST. PAUL UNION STOCKYARDS COMPANY, SOUTH ST. PAUL, MINN.

Comparison of Receipts and Shipments of Livestock for February, 1915

	Receipts					
	Railroads	Cattle	Calves	Hogs	Sheep	Horses
C. R. I. & P.	473	156	532	44	.....	27
C. G. W.....	1324	200	8808	1455	33	192
C. M. & St. P.	4011	697	27730	1635	127	558
M. & St. L...	2741	710	15313	186	.....	331
C., St.P.,M.&O.	4357	861	29100	850	3	581
C. B. & Q....	405	48	3512	69	.....	66
M.St.P.&S.S.M.	3258	1104	35646	972	4	562
Gt. Nor.....	6522	2499	67332	8951	208	1109
Nor. Pac.....	2412	290	20948	49880	14	632
St.P. B. & T.	.....	.....	.....	.....	.....	.....
Driven In....	576	113	1301	408	22	.....
Total.....	26079	6678	220222	64450	411	4058
Inc. over 1914	.....	.....	103699	15852	64	1127
Decrease.....	421	321	.....	.....	.....	.....
Jan. 1 to date	57854	13351	489137	109769	625	8837
Inc. over 1914	4054	.....	267036	7626	.....	2584
Decrease.....	.....	627	.....	.....	3	.....
Average Wts.	839	171	200	82	.....	.....
	Shipments					
	Railroads	Cattle	Calves	Hogs	Sheep	Horses
C. R. I. & P.	812	.....	.....	.....	.....	23
C. G. W.....	565	13	927	2061	.....	34
C. M. & St. P.	4861	157	26471	19787	93	467
M. & St. L...	290	14	.....	.....	102	17
C., St., M. & O.	2102	21	22352	275	104	275
C. B. & Q....	355	54	20699	5659	87	232
M.St.P.&S.S.M.	1316	6	.....	24222	9	147
Gt. Nor.....	1367	122	376	1081	2	52
Nor. Pac.....	1539	65	.....	.....	31	53
St. P. B. & T.	.....	.....	.....	.....	.....	.....
Driven Out..	262	108	474	21	46	.....
Total.....	13469	560	71299	53106	474	1300
Inc. over 1914	.....	.....	42135	18181	123	374
Decrease.....	1421	115	.....	.....	.....	.....
Jan. 1 to date	28705	1093	189579	97263	707	2977
Inc. over 1914	.....	.....	100780	27330	67	170
Decrease.....	2076	238	.....	.....	.....	.....

Keeping the horses well groomed is an important item in the proper care of horses, as the cleaner the horse's skin, the warmer the hair coat will be. The importance of grooming is not sufficiently realized in our sections. It is yet looked up to as a kind of unnecessary performance in the nature of vanity. This it is not and it cannot be compared with some of the phases of toilet making of people. Grooming is essentially what a change of underwear is to a man and we may imagine, how healthful and pleasant it would be to keep on the same underwear during the whole winter and then to depend on the spring rains to do the laundering.

When spring work approaches, the feed can gradually be increased, not perhaps to a hard working ration, but materially above the winter ration. In horses which during the winter have acquired what we commonly call a hay-belly, the roughage ration must be shortened and the shortage compensated for by a corresponding increase above the normal increase of the winter ration.

In all horse feeding, we still must attach the greatest importance to hay and oats and in preparing the horse for spring work, we should confine ourselves to these articles of diet. It is proper to add a little corn to the ration, after work is well under way and when the horses commence to show a little wear and tear on this account.

When work actually begins, the horses must be used with considerable caution, because no matter how judiciously we have fed and managed them during the winter, the lack of muscular strain will have produced a little "softness" which can only be overcome by bringing the animals by degrees up to their accustomed labor capacity.

The rule should be that when such horses are kept in the stable (Sundays, holidays, and on account of rain) that the grain ration be immediately reduced to one-third or one-half, while the animals must be given some opportunity for exercise.

CLASSES OF SHEEP

Excerpt from Farmers' Bulletin
576, by F. R. Marshall
APRIL—SEVENTH YEAR

There are 30 breeds of improved sheep that have been brought to fixed types as adapted to the needs of their native homes. Of these, 12 are well established in the United States and a number of others are gaining in popularity. The better-known breeds can be grouped into three classes, each

class having its own general qualities.

The Middle Wool class includes Southdowns, Shropshires, Hampshires, Oxfords, Dorsets, Cheviots, Suffolks, and Tunis, the last two not being numerous.

The Long Wool class includes the Cotswold, Leicester, and Lincoln breeds, and the Romney Marsh, which is not as well known in America as the others.

The fine-wool class includes the American Merino and the Rambouillet. The various strains of Merinos formerly known by numerous names are now grouped into three types, A, B, and C.

Middle Wooled Sheep

The following breeds are included in this class: Southdown, Shropshire, Hampshire, Oxford, Suffolk, Dorset, Tunis, and Cheviot. The first five are collectively referred to as "down" breeds, because of the nature of the country in which they were developed. This country is one of ranges of hills or "downs," as they are called in the southern part England. "Down" breeds have all been bred primarily for mutton, with special emphasis upon some useful character considered necessary for the style of farming and the

markets of the various counties or shires from which most of the breeds take their names.

The Southdown

The Southdown is the oldest of the middle wool breeds and on that account flocks of the breed are strikingly uniform in their qualities and appearance. The ewes are good mothers and milkers. With good management the number of lambs raised will average 120 per cent of the ewes bred.

The Southdown is readily recognized by its very blocky, low set appearance. The breadth of the back, thickness of loin, with the plumpness

GET FREE IT

We are giving Ropp's New Calculator FREE to every farmer or land owner who has not yet sent for a copy. Ropp's Calculator should be in the hands of every farmer. It will instantly give the correct answer to any business problem that can be settled by arithmetic. We will also send you our free illustrated catalog on

SQUARE DEAL FENCE

Which tells you why it is better than any other fence and where to get it. Land owners, if you want a farm fence that will last, and stay trim and tight the year round, write for these FREE books today.

Keystone Steel and Wire Co.
6032 Industrial St.
PEORIA, ILL.

ST. PAUL UNION STOCKYARDS COMPANY, SOUTH ST. PAUL, MINN.

Comparison of the Origin and Disposition of Livestock for February, 1915

Origin of Livestock Received						
States	Cattle	Calves	Hogs	Sheep	Horses	Total Cars
Minnesota...	18779	5878	120798	8299	83	2386
Wisconsin...	2484	628	16695	241	6	330
Iowa.....	92	1	924	.....	31	19
Far South.....	.....	.....	.....	.....	.....	.....
So. Dakota....	1066	31	13907	242	52	224
No. Dakota...	2857	82	56212	3094	239	758
Montana.....	31	.....	3249	52574	.....	249
Far West.....	.....	.....	.....	.....	.....	.....
Manitoba & NWT.	527	43	8378	.....	.....	84
Far East.....	.....	.....	.....	.....	.....	.....
Returned....	243	15	59	.....	.....	8
Totals.....	26079	6678	220222	64450	411	4058
Disposition of Livestock						
So. St. Paul P'k'rs	12908	5960	149191	10083	.....	.....
Cy. & St. Butch.	359	28	2355	.....	.....	33
Outside Packers	963	9	64724	102	.....	595
Minnesota...	2423	267	203	2890	98	100
Wisconsin....	1187	54	.....	608	35	51
Iowa.....	1043	.....	872	91	23	42
Nebraska....	.....	.....	.....	.....	22	1
Kans. & Mo..	60	.....	.....	.....	.....	2
So. Dakota....	2173	68	.....	.....	.....	75
No. Dakota...	3502	110	.....	.....	4	110
Montana & West.	.....	.....	.....	.....	.....	.....
Far South.....	.....	.....	.....	.....	.....	.....
Manitoba & NWT.	.....	.....	.....	.....	.....	.....
Mich. & E. Can.	383	.....	.....	512	62	18
Chicago.....	1073	9	2815	48340	66	253
Ills. (ex Chicago)	.....	.....	.....	563	122	8
Eastern Points	59	.....	.....	.....	42	4
Serum Plants	.....	.....	271	.....	.....	.....
Returned....	244	15	59	.....	.....	.....
Totals.....	13469	560	71299	53106	474	1300

of the thighs and twist, are breed points of greatest value. The breeders' association for this breed is American Southdown Breeders' Association, Frank S. Springer, secretary, 510 East Munroe Street, Springfield, Ill.

The Shropshire

The Shropshire is the most widely known and bred of the "down" breeds in America. In body it is intermediate between Southdown and larger breeds. The lambs reach common market weight later than the larger breeds and slower gains may be most economical in some sections. Where sheep raising can not be made a specialty, it is often desirable to keep the lambs to be finished in winter quarters. Under such management the lambs of breeds of intermediate size are not likely to be above the best selling weight when sold.

In weight, length, and fineness of fleece the Shropshire ranks very high and the proceeds of the wool are a very important part of the income from the flock.

The breeders' association for this breed is American Shropshire Registry Association, Miss Julia M. Wade, secretary, LaFayette, Ind.

The Oxford

An idea of the Oxford may be gained from the fact that the blood of the Hampshire and Cotswold was used in forming the breed. The fleece of the Oxford is of special importance. While usually more open than in similar breeds, yet it is close enough for protection, and the extra length adds to the weight as well as making it useful when length of fiber, without great coarseness, is needed.

The typical Oxford is a large-framed, heavy-boned, strong-looking sheep. The appearance of size is added to by the extra length of wool, though some individuals run to the shorter, more compact style of fleece.

The breeders' association for this breed is American Oxford Down Record Association, W. A. Shafer, secretary, Hamilton, Ohio.

The Cheviot

The Cheviot is a mountain breed. It is accustomed to grazing over rough places and is very active and alert, both in appearance and behavior. It is vigorous and hardy, and capable of producing mutton upon lands unsuited to other breeds.

There are no brown markings, and the bare white face with the strong nose, prominent eye, and erect ear have gained the Cheviots many admirers.

The breeders' association for this breed is American Cheviot Sheep Society, F. E. Dawley, secretary, Fayetteville, N. Y.

(Continued in the next issue)



Poultry Department



OVERFEEDING MORE DANGEROUS TO YOUNG CHICKENS THAN UNDERFEEDING APRIL—SEVENTH YEAR

Overfeeding is more dangerous to young chickens than underfeeding, say the Department of Agriculture specialists in raising poultry. Young chickens should be fed from three to five times daily, depending upon one's experience in feeding. Undoubtedly chickens can be grown faster by feeding five times daily than by feeding three times daily, but at no time should they be fed more than barely to satisfy their appetites and to keep them exercising, except at the evening or last meal, when they should be given all they will eat. Greater care must be exercised not to overfeed young chicks that are confined than those that have free range, as leg weakness is liable to result in those confined.

The young chicks may be fed any time after they are 36 to 48 hours old, whether they are with a hen or in a brooder. The first feed may contain either hard-boiled eggs, johnnycake, stale bread, pinhead oatmeal, or rolled oats, which feeds or combinations may be used with good results. Mash mixed with milk are of considerable value in giving the chickens a good start in life, but the mixtures should be fed in a crumbly mass and not in a sloppy condition.

After the chicks are 10 days old a good growing mash, composed of 2 parts by weight of bran, 2 parts middlings, 1 part cornmeal, 1 part low-grade wheat flour or red-dog flour, and 10 per cent sifted beef scrap, may be placed in a hopper and left before them at all times.

As soon as the chickens will eat the whole wheat, cracked corn, and other grains, the small-sized chick feed can be eliminated. In addition to the above feeds the chickens' growth can be hastened if they are given sour milk, or buttermilk to drink. Grow-

ing chickens kept on a good range may be given all their feed in a hopper, mixing 2 parts by weight of cracked corn with 1 part of wheat, or equal parts of cracked corn, wheat, and oats in one hopper and the dry mash for chickens in another.

The U. S. Department of Agriculture recently issued Farmers' Bulletin No. 624, entitled "Natural and Artificial Brooding of Chickens," which contains the practical instructions. It may be had by poultry raisers free of charge on application to the U. S. Department of Agriculture, Washington, D. C.

PURE BRED S. C. W. LEGHORNS
Cockerels, \$1.25 each; 6 or more \$1.00 a piece. **T. I. MARTINSON**
Christine - North Dakota

BEITH'S WHITE WYANDOTES
Winners at Crookston, St. Paul, Minneapolis and Fargo, N. D. Our birds are bred to lay as well as they are bred to win.
J. C. BEITH

Wheatland, - North Dakota

Barred Rocks

Dakota Strain - Bred to Lay and Win
BRADLEY-HAWKINS-TRUCK-ENBROD STRAINS

My birds won at **Fargo, 1915, 1st cock, 2nd and 3rd hen, 3rd pullet.**

Eggs for sale from four grand pullet and cockerel matings at from \$1.50 to \$5.00 per 15. The best matings fifteen years experience can produce. Write for free catalogue. Stock all sold for season.

PERCY BEALS
P. O. Bx. 736, - Fargo, N. Dak.
Oldest Stock in North Dakota

Buff Orpington Stock. Eggs: 15 for \$1.50. Duroc Pigs, yearling Boar. **G. H. Johnson**, Rt. No. 2, Evansville, Minnesota.

EGGS! EGGS!!

From thoroughbreds—Geese, Turkeys, Pekin, Rouen, Muscovy and Runner Ducks, White, Barred, Buff Plymouth Rocks, Hamburgs, Games, Black Langshans, Houdans, Orpingtons, Rhode Island Reds, White and Silver-laced Wyandottes, Partridge Cochins, Leghorns, Bantams, Pearl and White Guineas. Poultry eggs, 15 for \$1.00; also Rabbits, Hares, Fancy Pigeons. Write for free Circular. **D. L. Bruen, Platte Center, Neb.**

Wisconsin Wins In Big Hatching Contests EVERY YEAR

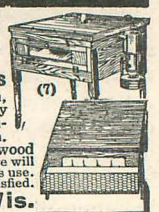
130 Egg Incubator
130 Chick Brooder
BOTH For \$10
Freight Paid East of Rockies
180 Egg Incubator and Brooder \$12

Wisconsin Incubators won in 1910, 1911, 1912, 1913 and 1914 in National Hatching Contests—Thousand of machines competing. Catalog tells all about it—and why Wisconsin are winners. If ordered together—

BOTH MACHINES \$10—Freight Paid East of Rockies

Wisconsin have hot water heat, double walls, dead air space between, double glass doors, copper tanks and boilers, self-regulating. Nursery under tray. Incubator and Brooder shipped complete with thermometers, lamps, egg-testers, all set-up, ready to use when you get them. Incubators finished in natural color showing high-grade Calif. Redwood lumber we use—not painted to cover up cheap material. Send for catalog and we will send you a sample of the material, then you can compare it with the kind others use. If you will do this we know you will order a Wisconsin. Money back if not satisfied.

Wisconsin Incubator Co., Box 88 Racine, Wis.



POULTRY NOTES

It is taking a big risk to continually change the bill of fare. Too many cannot let well enough alone.

Trap nests make the hens tame, due to frequent handling, and this in itself has a tendency to increase egg-production.

The poultry industry in the United States can well be credited as the billion dollar business. The hen is a giant in the financial world.

Our English cousins are great fanciers. Probably more so than any other country. France leans more to utility, while America prefers a combination of both utility and fancy.

Laying stock should have all the feed that they will consume. They need it for the heavy production of eggs. As a rule, it is difficult to overfatten hens that are in the height of their laying.

Trap nests allow of no guess work. No other method can equal it, as there is no other way by which we may learn the true condition of our stock as well as a correct report of what they are doing.

Houses for chicks and growing stock should be raised a foot above ground. This will prevent dampness, and at the same time, if the front of the foundation is open, will not afford a hiding place for rats.

Hardiness does not go by color of plumage. Hardiness depends upon the care given to fowls. True some breeds are more susceptible to colds than are others, but all breeds will become victims if they do not receive the right treatment.

Changes in the bill of fare must be made gradually. Radical changes quite frequently spoil the appetites of fowls, and hens that do not partake of sufficient nourishment cannot be expected to do very good laying.

Caging fowls separately for two weeks, while fattening them, will produce tender meat; while, on the other hand, where fowls are yarded they are apt to nag and chase each other so that the muscles harden and the meat toughens.

Heavy layers do not produce as large-sized eggs as do those of moderate qualifications. Food, too, has something to do with this. Heavy

feeding, especially of middlings and green bone, will produce heavy laying, and consequently smaller-sized eggs.

Last season we had a hatch of Brahma chicks come off the middle of August. It was intended to use them for killing chickens in January. But, despite a cold and stormy winter during which time they were cooped up, those Brahmas grew right ahead, and by the last week in February they had so matured that they were ready to lay. The old theory that it is necessary to hatch Brahmas in February or March to insure growth has long since been knocked in the head.

There is a good and a bad trait connected with having the fowls tame. It is good from the fact that tame fowls are contented, and contented hens are layers. Wild and excitable hens are, as a rule, poor layers. Tame fowls can be picked up without scaring the rest of the flock. On the other hand, tame fowls are often allowed to eat out of the hands and are thus given extra food on account of their cuteness, the consequence being overfat. Have the fowls tame, but do not over-indulge them.

It is a good business policy to reject as doubtful all eggs found in a nest that was not visited the previous day. Such eggs should be used in the home kitchen, when they may be broken separately. During the summer, the eggs as soon as gathered should be put in the coolest place possible. All cracked and dirty eggs should be used at home. Such eggs are perfectly wholesome if consumed when fresh, but when marketed are discriminated against, and are likely to become an entire loss.

It is not an easy matter to overfatten the laying hen, as her first object is to utilize the food for the making of eggs, after having consumed sufficient to repair the wear and tear on her strength in the production of eggs. Laying fowls are great eaters and drinkers. In the book "Poultry Secrets," published by Farm Journal, of Philadelphia, is shown a trap nest whereby the hen, after laying, passes into another pen, and at the night feed all the hens in this pen are given an extra allowance of food, while those that have not laid are given only the usual allowance. This plan will at once appeal to the poulterer, as it will be the means of adding sufficient food for material for those which need it most, and at the same time preventing non-layers from becoming overfat.

Hatching eggs from my selected breeding pen, headed by Red Chief, a bird of grand type and color, \$2.00 per 15. Eggs from my good utility flock, \$1.50 per 15, \$3.50 per 50, \$5.00 per 100. I raise R. C. Reds exclusively.

JOS. O. BERG
R. 2, - - - Hendrum, Minn.

WHITE HOLLAND TURKEYS & BARRED PLYMOUTH ROCKS

Eggs for hatching from choice matings. Turkey eggs \$3.50 for nine eggs. Rock eggs, pen No. 1, \$2.50 for fifteen eggs. Pen No. 2, \$1.50. Express or parcel post prepaid. Not guaranteed by parcel post.

ROY W. JACOBS, - - WADENA, MINN.

BOURBON RED PURE BRED TURKEY TOMS, good ones, \$3.50 each. Toulouse Geese, \$4.00 per pair. Mrs. F. Spriggs, Maddock, N. D.

Breed White Wyandottes. Eggs for sale from vigorous trap-nested stock. My birds win in show room wherever exhibited. M. C. James, Valley City, N. D.

SINGLE COMB WHITE LEGHORNS

Hens and pullets, \$1.00 each; \$10 per dozen; Cockerels, \$1.50 each. Will make up one splendid pen of 15 hens and one cockerel for \$15. Order early. Jos. O. Berg, R. 2, Box 12, Hendrum, Minn.

For Sale. Nice Buff Orpington Cockerels at \$1 each. Mrs. John Alexander, Edmunds, N. D.

FOR SALE. Rose Comb Rhode Island Red Cockerels at \$1.50.

MRS. HEIDLEBAUGH
Pleasant Lake : : : North Dakota

For Sale—Mammoth Bronze Turkeys, Toms \$5 Hens \$3.50. Toulouse Geese \$3 to \$5 a pair. White Pekin Ducks \$1.50. Barred Rock Cockerels \$1.50 to \$3.00. Inquire G. W. Foogman, Grafton, N. D.

White Holland Turkeys, Toulouse Geese and Barred Rock Cockerels.

Gustav Larson : : : Northwood, N. D.

S. & R. C. White Leghorns. Blue Ribbon and Silver Cup Winners. Cockerels, \$1.50; Eggs, \$1 per 15; \$4 per 100. H. H. Hirschy, Lisbon, N. D.

S. C. R. I. Reds. High scoring cockerels. Eggs for hatching in season. Henry Mertens, Crary, N. D.

White Holland Turkeys, R. C. R. I. Reds. Stock and Eggs in season. Maurice H. Bliss, Geneseo, N. D.

EGGS FOR HATCHING, satisfaction guaranteed, Thoroughbred wide open laced, big utility, winter-laying Wilver Laced Wyandottes, bred for business and Indian Runner Ducks. 15 eggs \$1.50; 30 \$2.75; 50 \$4.00.
Anthony Elm, : : : Lansford, N. D.

EGGS. Thoroughbred White Leghorns, Ferris strain eggs, 15 for \$1.00; 100 for \$5.00 write Geo. Freeman, - - - Pilger, Nebr.

White and Columbian Wyandottes. Light Brahmas, and S. C. White Leghorns Over 30 years a breeder. Stock and eggs for sale. Michael K. Boyer, Box 27, Hammonton, New Jersey.

White Rock and Columbia Wyandottes and Buff Orpingtons. Stock and Hatching Eggs in Season. O. A. Barton, Valley City, N. D.

Latta's S. C. Rhode Island Reds. First Prize Winners wherever shown. Stock and Eggs for Sale. J. G. LATTA, Wheatland, N. D.

Plum Grove Stock and Poultry Farm breeders of Red Polled Cattle, R. C. White Leghorns and Buff Wyandottes. Stock and Eggs for Sale. V. E. GRANT, Prop., Cuba, N. D.

BRED TO LAY AND WIN

If you want Quality write

Enoch J. Peterson, Alexandria, Minn
Formerly Peterson Bros., Harwood, N. D.

HAUSMANN POULTRY FARM
Breeder of W. Wyandottes and S. C. W. Leghorns
Hillsboro, - North Dakota

Silver Campines and Buff Wyandottes. Great layers of large white eggs. Eggs and young stock for sale in season. E. K. Myhre, Valley City, N. D.

POULTRY Ducks, Geese, Turkeys, Pigeons and Dogs. We are the most extensive producers of thoroughbred poultry in the world. Our fowls have won the leading prizes at America's largest Fairs and Expositions. Breeds are reared on separate farms. Send ten cents for Color Plate Poultry Book and price list. It tells how to make money with poultry; how to build poultry houses; how to hatch and rear chicks; how and what to feed for eggs. Every fowl shipped is selected by Expert Licensed Poultry Judges.
UNITED POULTRY FARMS, BOX 31 HOPE, IND.

School and Home

Miss Ura Leader,
Ruralville, N. D.

Dear Miss Leader:

The fact that the one-crop system is a failure, even on the most fertile soil is now generally recognized everywhere. The one-crop system has been practiced in North Dakota about as long as profitable returns can be procured when this method is followed. In breaking away from the one-crop habit it will be found necessary to introduce more stock on the farm. I would neither preach nor practice a revolution in this respect. The change should be made by evolution. No farmer can afford to jump from one style of farming to another.

The old advice to "grow" into livestock is still "pat." Of all the classes of livestock the cheapest and easiest to "grow" into are sheep, swine and poultry. It takes but a small outlay to make a beginning. Besides these flocks or herds can be increased as rapidly as desired.

These breeds of stock possess several distinct advantages for the beginner. Quick returns from small investments are procured. The flocks can be increased or decreased without loss. Methods of handling and housing are fairly easily learned. However, the most important of all in most instances is the fact that it takes but a small outlay to make a beginning and that if the work is successful the returns come in a short time.

Sheep should be found on more farms in this state. A small number would be very profitable on all farms. Most farms will support a small flock on what is usually wasted. The run of a grain field, or corn field if it is fairly well mature will give the sheep a great deal of food and at the same time these animals are not apt to injure the crop to any extent. They seem to possess a marked fondness for weeds and other waste vegetation on the farm. They can be cheaply and easily wintered on low value forage.

As you, no doubt, know, sheep are kept for two main purposes; one is to produce mutton and the other is to produce wool. We have mentioned a third reason why they might well be kept in this state; that is, their use as scavengers especially on weedy farms. The breeds of sheep developed primarily for wool production are not of as much value for mutton as are the sheep grown primarily for that pur-

pose. In the same way the mutton sheep are not as valuable for wool production. In this state it is found advisable to have sheep with a reasonably tight fleece in order to protect the animal from dust and other storms.

It has been found very desirable in this state to try to develop a new type or breed. Such a sheep should have a fairly tight fleece and should at the same time produce a fairly good carcass. This is one reason why the industry has not developed so rapidly in the state as one might imagine that it should.

Sheep require little labor and usually keep in good health. They give quick returns in both mutton and wool.

The subject of hogs can be treated very much the same as the subject of sheep except that all hogs are grown for meat production. We have two distinct classes of hogs; the fat hog and the bacon hog. The fat hog may be compared to the beef cow and the bacon hog may be compared to the dairy cow according to discussions in my last letter. The difference between these two animals is the fact that the bacon hog has the ability to lay on fat in alternating layers with the lean. This is what the butchers call a marbled condition of the meat. Bacon brings more money per pound than most cuts found on the fat hog. Many people seem to think that the bacon hog on account of its rough form will not gain as rapidly as the other type. The facts are that the two classes of hogs make about equal gains on the same amount of food.

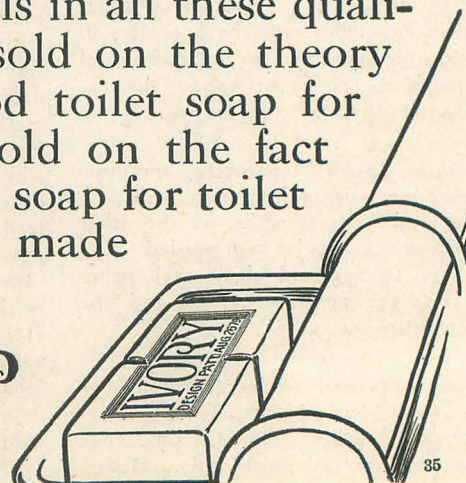
The different feeds grown in this state are especially well suited to the production of the bacon animal. Barley fits well into this ration. Our



WHAT is it that makes a soap suitable for the toilet? Is it not mildness, purity, quick lathering, easy rinsing, freedom from alkali?

Ivory Soap excels in all these qualities. It is not sold on the theory that it is a good toilet soap for 5 cents. It is sold on the fact that it is the best soap for toilet use that can be made at *any* price.

IVORY SOAP
IT FLOATS



corn has more protein than the corn grown in the "so called" corn belt states. In fact all of our feeds are higher in protein than are the feeds grown where the climate is warmer and more moisture is found in the summer. High protein content is important when it comes to producing growth of muscle, in fact when an animal is fed material high in protein there is a great tendency to make growth and a less tendency to lay on fat.

There are a great many different classes of poultry. I think that in selecting a breed of poultry the grower should take into consideration largely the type which he wishes to produce and then select and breed those which represent this type. There are several hundred different good breeds of poultry. Many of these have been bred purely for fancy points. However, the great majority possess utility and have been bred mostly for that purpose. In working with poultry it is highly desirable to have a good book or some of the poultry bulletins along this line. The poultry fancier has established many characters for classification; the coloring of the feather, position of the feathers and other characters usually considered of minor importance have been frequently used as characters in selection regardless of the form or the utility of the bird. From the standpoint of the farmer nearly all of our well established breeds of poultry will be found good. The newer breeds which are now in the hands of the fanciers and have not generally been introduced had best be avoided.

The care of the poultry is very important. This is especially true if large flocks are kept. There is not much danger of disease where only a few birds are kept on the farm. This is not true as the flocks are increased in size. The larger the flocks the more danger from disease. Health and vigor are the most important things on a profitable poultry farm. Dry, well ventilated houses are better than warm, poorly ventilated quarters. It is of the utmost importance to have the house thoroly ventilated but without creating a draft in the building. You can get good information along this line by writing to your own experiment station. Bulletins have been published along these different lines.

Since this is the time of the year when one should be planning the home garden it is well worth while to briefly mention this matter. Most people generally recognize the farm as a place where one should make a good living. It is not expected that one will "get rich quick" by farming. It does not

possess any of the characteristics of a get-rich-quick scheme. Now in providing a good living nothing excels the products which come from the garden. Vegetables not only furnish a very desirable form of food but a good supply has a marked influence upon health. We might consider vegetables in a diet about the same as silage and other green food for livestock during the winter time. In some respects they may be considered a tonic. Certainly they have a marked influence upon the health of the family.

Vegetables can be produced cheaply if the garden is properly planned and the right varieties are planted. There is no reason why the work should be burdensome in any way. Most of the

work can be done with horses and machinery. There is no reason why the garden should be entirely looked after by those who do not work in the field. If one were to carefully figure up the profits derived from the garden I imagine he would find that such big returns are secured from no other part of the farm. It provides a big portion of the living expenses.

Usually it will pay to have the ground for the garden highly fertilized and thoroly prepared. If possible the vegetable garden should be placed on different fields during different years. In this way one can keep rid of weeds and prevent the introduction of injurious insects and plant diseases.

Yes, There's the Red Ball It's Sturdy Old "Ball-Band"



Our honest determination to make "Ball-Band" Rubber Footwear the very best that money can buy has had a big reward.

Over eight and one-half million men wear "Ball-Band" Rubber Footwear. Over 50,000 stores sell it. Nearly every man who buys rubbers knows

"BALL BAND"

Every spot where extra strain comes on a "Ball-Band" is made strong. "Ball-Band" Rubber Footwear is made over a natural last. It fits comfortably and makes work easier. It saves money because it gives more days wear at a lower cost per day's wear.

Write for Free
Illustrated Booklet

"More Days Wear"

It tells you how to get out of "Ball-Band" all the good service that we put into it. A book worth having.

Mishawaka Woolen Mfg. Co.,

324 Water St., Mishawaka, Ind.

"The House That Pays Millions for Quality"

Look for the Red Ball

While, sheep, swine, poultry and a garden may be frequently considered of small importance on the farm and hardly worth the farmer's attention, still we find in many instances that practically all the living comes from these sources and that they really constitute some of the most important lines of farming practiced in this or any other country.

GARDEN INFORMATION APRIL—EIGHTH YEAR

More gardens are needed in North Dakota. To supply the needed information Circular No. 5 has been issued by the North Dakota Experiment Station. It is entitled "The Farmers' Vegetable Garden." It gives information as to the growing of each vegetable that can be grown in our gardens, telling its soil and climatic requirements, time and manner of planting and care required. A discussion is also given on the hot-bed for giving the tender vegetables a good start before they are set out in the garden.

This is a manual on gardening written to meet North Dakota conditions. The garden should supply a large part of the living for the farm home, both winter and summer, and this circular tells how to do it.

PORK PRODUCTION CONTEST

North Dakota boys and girls have demonstrated that North Dakota is in the best part of the pork production belt. The two contests held in 1913 and 1914 have proved to be of national importance. The results secured have been a stimulant to the pork production industry of the whole nation besides calling attention to the opportunities of pork production in North Dakota. These two Pork Production Contests have been more widely written up than anything else carried on in the state and have been instrumental in changing the opinion of North Dakota. It used to be looked upon as a purely grain state, but the boys and girls are making it to take rank as one of the best pork production states.

A new contest is being announced for 1915 by the Better Farming Section of the North Dakota Experiment Station. More prizes will be offered this year than ever before. Two of the large hog registry associations will offer cash prizes in addition to the regular prizes. The regular prizes are as follows: first, \$100; second, \$50; third, \$30; fourth, \$25; fifth, \$15; sixth to tenth, \$10 each; eleventh to twenty-fourth, \$5 each; and the

National Duroc Jersey Record Association offers in addition to the above, three prizes of \$25, \$15, and \$10 to the three contestants making the best record in this contest with pure bred Duroc Jerseys, while the American Yorkshire Club offers a cash prize of \$25 to the contestant who secures the second best results with Yorkshires and Thomas Canfield of Lake Park; Minnesota offers a pure bred sow or boar to the contestant standing first with the Yorkshire breed. The contestant that secured the best results with the pure bred Duroc Jerseys will also receive a pure bred sow from Peter Rutten of Osakis, Minnesota. This makes a total of \$415 in cash and two pure bred pigs.

The purpose of the contest is to increase the interest in pork production. Thru the results secured each contestant becomes a local demonstrator. The things that have been learned from the two previous contests are that spring pigs can be brought to a marketable size in seven months, or before cold weather, on North Dakota farm feeds. It has also been demonstrated that liberal feeding is the paying way, that is, to keep the hog growing steadily. It has also been quite evident that the cheapest feed is pasture and corn hogged down. These results will likely be still more marked this year, due to the high price of grain.

In 1914 twice as many hogs were marketed in North Dakota as in 1913. The contests were undoubtedly one of the factors in bringing this about.

The conditions of the contest are that the boy or girl secure a sow to farrow not later than May 1st, to feed and care for the litter and to report weekly the amount of feed used. The contest is to close November 20 and the litters will be weighed by a representative of the North Dakota Experiment Station. The awards are to be made on the basis of the largest production from a litter produced at the least cost in the shortest time. Any boy or girl that desires to enter the contest should write to the North Dakota Experiment Station, Agricultural College, North Dakota, for an application blank and full particulars. Information will be sent out to the contestants from time to time.

The boys and girls have done an important work for the state in entering these contests and doing faithful work as it is demonstrating how the farm products of North Dakota can be marketed so that much more than the ordinary market prices can be secured.

WE WANT MEN

To devote all, or part of their time selling our HARDY MINNESOTA GROWN nursery stock. YOU CAN MAKE MONEY handling our line. IT BEATS LOAFING ALL WINTER. You perhaps make good money during the summer, but are not employed in the winter. Write us at once for information and terms.

FAIRMONT NURSERIES

Box 8 :: :: Fairmont, Minn.

Without question the best wearing shoes obtainable.
The latest styles and a comfortable fit.

Mayer

HONORBILT SHOES

Made of the best bark tanned leather—combined with the most skillful shoemaking; genuine quality shoes at a reasonable price.

WARNING—Always look for the Mayer name and trade mark on the sole. If your dealer cannot supply you, write to us.

We make Mayer Honorbilt Shoes in all styles for men, women, children; Drysox, wet weather shoes; Yerma Cushion Shoes, Martha Washington Comfort Shoes.

F. Mayer Boot & Shoe Co., Milwaukee



Household Hints

By Aunt Maggie

FROM OUR EXCHANGES

Saving a Kimono Waist

Every woman knows that a dress with kimono sleeves wears out first directly under the arm, where the strain upon the seam is necessarily severe. To patch this place is impossible, and many a good dress is now being thrown aside because fixing this conspicuous place seems out of the question. But by this plan the dress may be saved and even made prettier than ever. Cut the sleeve on top, down the center, from the neck to the wrist; now insert in it some sort of appropriate trimming, such as a silk band, a strip of insertion, or an embroidered band. If this is two or three inches wide it widens both the sleeve and the waist just that much, and so makes sufficient fullness to allow for a deep seam under the arm where the soil or tear has been; and lo! the waist is not only mended but dressier than ever. If there has already been an insertion or lace set in along the shoulder and arm line, a wider piece may do the work.

For Little Hands to Clasp

When my youngsters start for school, these frosty mornings, each one has in each coat-pocket a china nest-egg which has been boiled with the breakfast eggs. They are at first almost too hot to touch with the bare hand, but are comfortably warm thru their mittens and long retain their heat. These china eggs are very cheap, and, unlike the real variety, do not advance in price in the winter!

Making Fruit Cake

When my mother makes fruit cake she puts all the ingredients together except the fruit, then pours one-half of the batter into the tin. The fruit is then thoroly dredged with flour and added to the rest of the batter which is poured in on top of the rest and the cake baked immediately. I have never eaten fruit cake in which the distinguishing ingredient is so thoroly mixed.

To Tie A Comforter

When tying a comforter, use this new and rapid method. Instead of setting and tying one stitch at a time, set the stitches the whole distance across before tying once. After chalking the line take a double thread longer than the width of the quilt, and proceed to set stitches the whole

distance across, carrying the thread along unbroken. A few snips of the scissors and you are ready to tie, unhampered by the constant change from thimble to scissors. The work is fully as neat as by the older method, and much faster.

Hemming Table Napkins

In hemming napkins or other table linen by hand you will find time saved and labor facilitated by first removing the thread from the sewing machine and running the article thru a hemmer of the required size, producing an even crease ready for the hand work.

I hope that this suggestion may help some one: When baby's little white stockings wear out at the top from pinning, cut off the tops so that there will be only about one and one-half

inches left to come above the tops of the boots. Around the top put a row of double crochet, into this row work small scallops, and you have a pair of serviceable and pretty short socks.

For pressing the seams of delicate fabrics, a bottle filled with hot water and used in the same manner as a flat iron is most satisfactory.



BIG ASSORTMENT 50 CENTS
Prepaid. Best varieties, including guaranteed Everbearer Strawberry Plants. Valuable book free, "Win Wealth With Strawberries." Best published. Tells how to obtain guaranteed quality small fruit plants cheapest. Send address for book. BERRY'S CREST, Box 185, Clarinda, Iowa

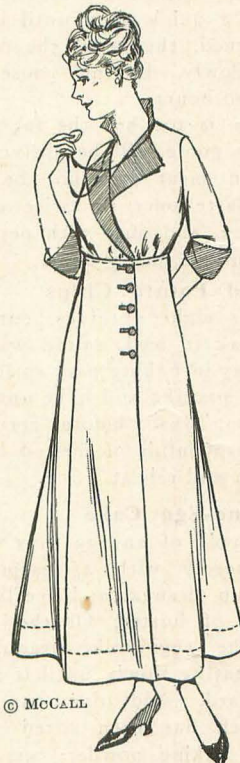


A Bargain Collection of FLOWER SEEDS

FOR 12 CENTS
10 choice varieties, all new, fresh seeds, sure to grow and bloom this season. Pansy, 60 Colors; Phlox, 10 Colors; Verbena, 18 Colors; Pinks, 12 Colors; Petunia, 10 Colors; Aster, 12 Colors; Poppy, 8 Colors; Stocks 10 Weeks, 8 Colors; Mignonette, mixed and Sweet Alyssum. The 10 Packages only 12c.

With each order we also include a copy of a quarterly magazine, devoted to special crops and intensive farming, with special attention to the care and handling of poultry. Tells how to make \$200 per acre per year on any farm from 5 to 100 acres. Good Poultry alone, 10c a copy; 25c a year, including a copy of new book, Intensive Farming. Write tonight. **SHOREWOOD FARMS CO., Saugatuck, Mich.**

NEWEST STYLES for SPRING



© McCALL

The Newest Style

McCall Pattern 6373. We are showing 49 other new and attractive March designs.

Obtainable only in
McCall Patterns

THE MOST ADVANCED
SPRING FASHIONS
are now here in the new

McCALL
PATTERNS

AND
OUR NEW
DRESS
GOODS

The latest styles are easily made at home by using McCall Patterns, always stylish, perfect fitting and easy to use.

Get the New Spring
Book of Fashions
Today



© McCALL

A Smart Combination
McCall Pattern 6369. We are offering 49 other attractive new March designs.

IF IT'S STYLISH IT'S McCALL - IF IT'S McCALL IT'S STYLISH

For sale at all McCall Dealers, or direct from

THE McCALL COMPANY

World's Largest Manufacturers of A Paper Pattern

McCALL BUILDING 236 to 246 West 37th Street NEW YORK

Seasonable Receipts

Edited by Mrs. Sadie Baird.

Cream of Pea Soup

Cook one can of marrowfat peas in three cups of water for ten minutes. Add one slice of onion and two teaspoons of sugar. Rub the mixture thru a sieve until nothing remains in the sieve but the skins of the peas. Melt four tablespoons of butter, add two tablespoons of flour, and rub together until thoroly mixed. Add two cups of milk, and cook until it thickens, then add one teaspoon of salt, one-eighth teaspoon pepper. Add the peas and cook three minutes. Serve.

Fruit Cake Without Eggs or Butter

Mix and boil for three minutes the following: one cup brown sugar, one-half cup lard, one cup water, one cup currants, one cup raisins, one teaspoon each of cloves and cinnamon. Mix this thoroly with two cups flour, one teaspoon soda, one teaspoon baking powder, one teaspoon salt and lemon extract. Bake in slow oven one hour.

Molasses Candy

Place in a large granite kettle two cups of molasses, one cup of sugar, two tablespoons of butter, and one tablespoon of vinegar or lemon juice. Boil until it reaches the crack stage, stirring constantly. Pour into a buttered pan until cool enough to handle. Pull until it is as light colored as desired.

To Cook Pot Roast

Place roast in kettle with two-thirds cupful vinegar. Let cook slowly in this until cooked dry, turning meat occasionally until roast is well browned. Then pour over it enough boiling water to finish cooking. When done pour into stock one-half cupful milk and one-half cupful cream and thicken for gravy. Especially good for meat that may be a trifle tough.

Pork Sausage

One pound pork, ground, one small tablespoonful salt, one-fourth tablespoonful pepper, one-half tablespoonful sage.

To Roast A Goose

Singe the goose, cut off the feet and head; make a vent under the breast-bone and remove the intestines—the goose does not have a crop, so that they can be taken out easily at the lower vent. Truss the goose into shape, keeping the legs down to this side of the body; put it in a roasting-pan, and add a half-cupful of water, and bake in a quick oven until it is thoroly browned, then cool the oven and cook slowly, if the goose is young, for two hours.

If the oven is too hot the fat will melt and the goose will be shriveled, and the lean meat will not be so palatable. Baste once or twice during the baking, and dust with pepper and salt when it is partly done.

Baked Potato Chips

Peel six or eight potatoes, cut in strips, let soak in iced, salted water, one hour. Lay in baking pan, sprinkle with salt and paprika and bake until a golden brown. Just before serving pour two teaspoonfuls of melted butter over them and reheat.

One-Egg Cake

Place the yolk of an egg in a cup and beat thoroly with a teaspoon. Cream one cup of sugar and one large tablespoonful of butter; fill the cup containing the egg yolk, gradually with milk, beating slowly until it is a smooth custard. Add one cup of flour in which has been sifted two teaspoons of baking powder; mix all together, adding stiffly beaten egg white. Add flour enough to make a thin batter.

Baked Potatoes

Select smooth, medium-sized potatoes. Scrub them clean with a brush. Place on the grate of oven which is at moderate heat, then gradually increase the heat. If the oven is too hot at first a hard crust is formed,

which prevents the heat from penetrating to the inside of the potato. As soon as they are baked soft, prick the skin to allow the steam to escape so that they will not become soggy.

You like to go Hunting Fishing Trapping

Then surely you will enjoy the *National Sportsman* Magazine with its 160 richly illustrated pages, full of overflowing with interesting stories and valuable information about guns, fishing tackle, camp-outfits—the best places to go for fish and game, and a thousand and one valuable "How to" hints for Sportsmen. The *National Sportsman* is just like a big camp-fire in the woods where thousands of good fellows gather once a month and spin stirring yarns about their experiences with rod, dog, rifle and gun. All this for 15c a copy or \$1.00 for a whole year.

Special Offer

Mail us 25c in stamps or coin for a three months' trial subscription to the *National Sportsman* and we will send you **FREE of Charge** one of our handsome Ormulu Gold watch fobs as here shown with Seal grain leather strap and gold plated buckle.

NATIONAL SPORTSMAN
153 Federal St. Boston, Mass.

A NEW CREATION
WEBSTER'S
NEW
INTERNATIONAL
DICTIONARY

THE MERRIAM WEBSTER
The Only New unabridged dictionary in many years.

Contains the *pith* and *essence* of an authoritative library. Covers every field of knowledge. An Encyclopedia in a single book.

The Only Dictionary with the *New Divided Page*.
400,000 Words. 2700 Pages.
6000 Illustrations. Cost nearly half a million dollars.

Let us tell you about this most remarkable single volume.

Write for sample pages, full particulars, etc. Name this paper and we will send free a set of Pocket Maps

G. & C. Merriam Co.
Springfield, Mass.

Absolutely Pure and Delicious.



An ideal beverage of high grade and great nutritive value

WALTER BAKER & CO.
LIMITED
DORCHESTER, MASS.
ESTABLISHED 1780

VISIT

California's Expositions

**Low Round Trip Fares Daily
to November 30**

**Three Months Limit With Liberal
Stopover Privileges**



See the two greatest world's fairs ever held - - both expositions are in celebration of the opening of the Panama Canal, the greatest engineering feat accomplished. Both universal in their scope.

**Travel via
Northern Pacific
AND SEE**

Yellowstone National Park

Through trains to the North Pacific Coast—rail or water from Puget Sound Cities or Portland to San Francisco via Astoria and the Great Northern Pacific Steamship line.

Free descriptive literature including Exposition folder and full details of trip furnished.

J. A. G. Risk, Agent, Lisbon, North Dakota

‘‘SEE AMERICA’’



Precious Metals Ground in Linseed Oil

THAT'S what Horse Shoe Brand House Paint is: every gallon of it is strictly pure lead and zinc ground in strictly pure linseed oil.

It's a fact; and when your house puts on a coat of Mound City House Paint it fronts the world, so to speak, in cream, or gray, or tan, or white armor plate.

Strictly pure zinc makes up what lead lacks: strengthens where lead is weak—is harder—whiter—more clear—and beautiful.

White lead is just what its name implies, metal—soft metal, of great covering power.

Strictly pure linseed oil is the liquid that binds these natural partners together.

Zinc takes more oil to the pound than lead, and, because "oil is the life of paint" lead plus zinc makes the best paint known.

Base metals are sometimes used in paints, but their value is unproved—and unless you are willing to lend your two or three-thousand-dollar house as a subject for experiment—better keep on the safe side and buy Mound City Horse Shoe Brand House Paint, which is made of really precious metals, in right proportions, and rightly ground in pure aged linseed oil.

Mound City Paint & Color Co.

Good Makers of Good Paints

ST. LOUIS, U. S. A.

NORRIS B. GREGG, Pres.

WM. H. GREGG, JR., Vice-Pres.

E. H. DYER, Sec